# ILEA defies DES over poly course closure

by Judich Judel

The laner Londoo Education Anthrity this week defied the Departmeet of Education and Science by proposing the closure of the general

The decision, taken by the authority's further and higher calication subcommittee on Wednesday, is the latest round in its disagreeioem with the Government over its offication of teacher training places.
The battle has centred un the

The batter has control in the The Shore-ditch College, which specializes in cruft and design technology, placed ontside the London allocation on the grounds that ir is a national smaller of creft toocher. supplier of craft teachers.

in its ounouncement about the future of colleges last week, the Government recognized this to some extent by giving London on additional 114 initial teacher training places for Shoreditch, but left the authority to flud onother 176 places from its other colleges.

The DES proposed that the big-

omics students.

However, if the DES proposals were accepted it would be difficult for Avery Hill to offer a reosonable range of subjects and to keep open the Mile End annexe for mature

80 per cent of new teachers in

The places released from South tlank would go partly to the Poly-technic of North Landon but mainly to Arery Hill. At Thames Pulytechnic where there are physical education and general courses, the numhers would remain unchanged.

Presson Polytechnic is calling on its local education authority to make

an early decision about the future of its in-service teacher education provision following the disclosure that it could be reprieved.

The Government in its annumeer the Government in its annumeer ment on college closures last week ruled that the polytechnic should lose all its initial training courses. But the Department of Education and Science has since disclosed that the decision about the future of Inservice courses lies in the bands of the Loncashire education authurity.

orecting between polytechnic and l.e.a. officials is due to take place early in September. Meanwhile the polytechnic is pressing for the issue to be raised at the last education committee meeting before the summer recess next. Tuesday.

The DES proposed that the biggest cut should be made at Arcry Hill, where it sail places should be reduced from 600 to 468, and that the Polytechnic of North London's places should be cut from 290 to 272.

In o report to the committee, Mark Peter Newsam, the education officer, argued that a better substitute of the existing facilities for la-service provision at the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the college, said this week: "We want the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the college, said this week: "We want the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the college, said this week: "We want the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the college, said this week: "We want the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the local authority to consider this issue as a matter of integency. We still do not know exactly what the DES had in mind." The existing facilities for la-service provision at the local authority to serve the existing facilities for la-service provision at the built do not know exactly wh

# | Middlesex governors overturn | Council call no confidence vote in director

Divernors at Middlesex Pulytechnic fidence in the college directorate and reaffirmed their support for Dr Ray Rickett, the director.

The declaration of support over-turns a vote of no confidence in the directorate by the college's aca-demic bourd last month, a decision taken following the controversial postponentent of examinations by Pr Rickett during a lengthy student occupation earlier this year.

cept the postponent rading was "taken after consultation with the college's examinations of mass reversed within four working as a second to the publication of the public

with the academic staff prior to the decision to possipone the axaminations was nverwhelmingly defeated. The Nathutal Association of Teachers in Further and Higher Education, some rourse leaders and opposed the postponement ruling. They have called for a decentraliza-

for more

by Clive Cookson

industrial design social

school to postgraduate bedi-down in a report published.

The report drawn a binan conneil this week.

The report drawn a binan conneil tree bade.

Canneil vice-chairman in Carter, starts be

tion of decision making at the poly-technic and full consultation in the

should should be said, that the postpanement ruling the college's examinations office and was reversed within four working alsys of the publication of a revised examination timetable."

It declared regret that student mitten and the fluction and a continued? "Legister that the polytechnic method continued?" despite the fact that the polytechnic method decreased the directorate of failing to communicate their decisions. "The governors may seek information about the dispute and the way ing into confidence in the directorate for their alleged lack of consultation.

Art on 41.

# Art on the embankment



# THETIMES SUPPLEMENT design train July 15, 1977. No. 299



How It was ond how it is-restoration work on The Dome, an eighteenth century house at Bognor Regis, has been completed at a cost of £400,000 and the building was handed over to the West Sussex. Institute of Higher Education last week as its administrative centre.

# tu pursue design as a see to pursue the pursue to major steps on national ligent children with comparing to more traditional t credit transfers announced

The nacycar foundate in or and dealing the Camell for Marlonal Academic seasons as helige between the Sound foundation of the Camell for Marlonal Academic seasons and higher education, we see that the camell for Marlonal Academic seasons and the Open University arises, and are camelled for Marlonal Academic seasons and the Open University and proceed the camelland and the Camelland for Marlonal Academic seasons are thought of the Camelland for Marlonal Academic seasons are thought of the Camelland for Marlonal Academic seasons are thought of the Camelland for Marlonal Academic seasons are continuous and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic seasons are continuous seasons and the Camelland for Marlonal Academic se

# Graduates hold their own in job market

the implyment among university and polyhecluile graduates increased only fractionally in 1976 compared with the previous year, statistics released this week by the Central Services Unit for Careers and Appaintment Services that for Careers and Appaintment Services that for Careers and Appaintment Services that for Careers and Appaintment of Britalo's graduates and successful higher national diploma students in 1976, show that the percentage of first degree students much played six

months after leaving university rose to 6.1 per cent, emapared with 6 per cent in 1975. The level of per cent in 1975. The level of per cent in 1975 to graduates thereosed from 8.9 per cent in 1975 to 9.4 per cent last year.

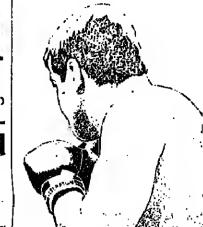
But the new CSU reports do show that the position of water graduates this warsen more signification.

cantly. In 1975 only 5 per cent of women leaving university were unemployed by the following December, rearly 1 per cent less than last year. The proportion of women first degree graduales from polytechnics failing to flud jobs increased from 9 per cent in 1975 to 10 per cent.

Higher national diploma holders fared hence. By December only 6.5 per cent were without jobs, compaced with 7 per cent in 1975 and 8 per cent in the two previous years.

Demand for graduates from amun-facturing limits arises was broyant throughnor must of the year. But the graduate curry showed o rather smaller increase than had been predicted, with university graduotes in michal similes, jure science and the arts accounting for most of the

Contents Criticism Inc



A literary avant garde may be parochial and pretentious but it can have a vitality which English criticism lacks today, argues Patrick Parrinder, 15

### Copyright law

Frances Gibb looks at the havoc photocopying machines have wrought with the Copyright Act, 9 leader, 14

### German academics

Ralf Dahrendorf discusses how Willy Brandt's liberalizing law.backfired and suggests ways of easing

# Sandwich course boom brings problems

The trend away from Industry-spinosared to university-laisud samiwich studies since the early 1970s and their horseston manufactor could their increasing annularity cand cause massive administrative prob-lems for both sectors, it was pre-

The director of the Institute of Indistrial Training at Bruoel University, Mr Also Doniels, told 110 participants at the two-day national conference on university sandwich courses, held at Salford University, that the propurtion of degree students on the courses had increased to 35 per cent from 31.5 per cent a descade and.

Ha predicted that by 198f there could be about 60,000 on some form of sandwich course to the palytechnics and other colleges in England and Wales, with a further 17,300 in the universities. This would mean an emproying the challeng of present the control of the an approximate doubling of numbers slace the early 1970s.

Such growth would mean increased adululstradve workloads for academic tutars, who would have less than for teaching and research, and increasing duplication of effort. The difficulty was in providing enough meaningful work experience that could be proposely supervised.

Oakes spreads jam tomorrow

thickly on adult sector

So vital was the rule of the academic timor that employers' contacts were being increasingly guarded even from members of the same department as the lass of work placements would result in further groundwork having to be done. The move of a tutor to another number.

Supervisian was being made more difficult by the greater geographical syred of placements as well as their increased number.

Nevertheless, despite the ceans mic recession, 89 per cent of Council for Netional Academic Awards' in move of a tutor to another nuiver-sity was more and more likely to couse administrative chans. Ar Daniels sald the proportion of

univorsity-based students, those far whom work placenicuts had to bo whom work placentents had to be found by the tutors, had becreased from 56 per cent in 1971 at Brunel to more than 80 per cent at present. The university currently ruquired approximately 1,600 work plarements annually, one-third in the growth areas of economics, law, psychology, government studies and sociology.

The problem of placements was also couched by Mr Roy Close, director-general of the Which Pastitute of Manageareus, whose paper was road by the BIM's lead of man-

The difficulty was in providing enough mondingful work experience that could be propely supurvised.

them.

Yet there was strang support for greatec loks between work and study and for the sundwich principle. Two-thirds of leavers felt that univarsity science courses should incarparate psrlads af pructical work experience at regular intervals end balf felt arts-based caurses should da sa. increased number.

Nevertheless, despite the ecanomic recession, 89 per cent of Council for Netional Academic Awards' business studies sandwich graduates were gettlog jabs struight after finishing studies, as were 80 per cent of university business graduates. Only two per cent of the CNAA graduates remained unemplayed six months after graduation.

The conference organized by the

The conference, organized by the The conference, organized by the Universities' Committee on Jute-grated Seadwich Courses, drsw representatives from 1f universities, five polytechnics and 48 schools as well as industry and further education.

tion.

Many school headmasters and careers masters urged more information on saudwich courses. A survey of leavers et Aylesbury Grammar School found that andy 43 per cent had considered applying for entry to a sandwich course and of these only ane-half had doos so. Figures calculated by Brunel-tho Figures calculated by Brunel—tha only university to restrict all undergraduate etudies to sandwich courses—showed that in 1975-76 Brodfard and Surrey bed the largast saudwich intakes, both excacting 2,000. This was followed by Brunel, Laughborough, Aston, Bath and UWIST with between 1,000 und 2,000 and City and Salford Universities with ebout 900. At all but City, Salford and UWIST did sandwich studies account for a majority of places. Leavers oot applying most often thought no course opplied to their subject or could not find a course which appealed to them. A large group said the idea of sandwich



# Prison officers' case put

Prison officers case put

Prison officers as well se bimides in affect the affect of the change of allied checulon boaries provided by allied and a provided by a single checulon boaries are provided by a single checulon boaries are provided by a single checulon boaries are consequently as the consequent of the consequent of the consequent of the consequent of a single checulon boaries are consequently as the consequent of the consequent of the consequent of a single checulon of the consequent of the consequent of the consequent of a single checulon of the consequent of the co

on Adult Educution first proposed it and it will not have its first meeting till this autumn, the AAB passed e generans modan con-grunduting the minister on its establishment.

The council would also be inck-

The adult actor must not become that part of the education service which can must easily be out back, just become central government has an standary powers to compel local outharities to increase or even maintain caloning levels of spending, Mr Oahes said last week. ing at how to make the hest use of resaurces ovultable in the sbort

learn outharithes to increase or even maintain extensing levels of spending. Mr Oahes suld lost treek.

Speaking in Ledeester at the start of the annual conference of the

# Soviet guest of honour forced to miss birthday celebration

Control to a decision of the control of the control

# Appeal for better understanding of the deaf

nutervals end bulf felt artis-based caurses should da sa.

However, while most felt that vocational training would lead to better emplayment prospects, any figure cent were prepared to determine their future career chaice by entering higher studios—an ionicotian af the likely cauloued decline in industry-sponsorod sandwich.

Mr Paul Redfern, o deaf student currently of North London Politechnic, said that it would be reast if the small, but increasing, number of deaf people entering higher education had to undergo that is experienced while studying for law degree at Manchoster Polytechnic four years ogo.

When he started the course, he had been confident that he would to able to lip-read during lecture. The school he had attended had concentrated on oral teaching ted niques, of which hip reading he basic form of communication.

But he had not fareseen that many lecturers do unt look at their students during lecture. Let had look out of the window, at their notes or at the blackboard. When he had esked his personal tutor for help, be had been told to "try horder".

After two terms of struggling through by photocopying other student's notes, the polytechnic had agreed to allow Mr Radfern one to-one tutorials instead of the legitures. But while this eliminated the communication problem, it had oneant that he was totally isolated from the other students and that he had no one apart from his tutor with whom to discuss the course.

As a result, he failed his exemu.
Ho was fartunately occupied in a second degree course, in social at ence of North London Polyrechile. There he was outengtically allocated an interpreter, who attended every fecture, and he has now successfully completed the current.

Dr John Denmark, consulted psychiatrist et Whitingham Horpital, Prestan, told the conference that the teoching of sign longuage to deaf children was still o very controversial issue, but one that wes bighly pertinent to the numbers of deaf school-leavers continuing their education.

More schools were now teaching sign language and it was becoming widely, if not universally, recognised that where oral techniques alone were used, communication difficulties at the school led to deal children remarked. difficulties at the school led to deal children remolning of a pre-verbal stage for a protrocted length of

Dr Dermark said that it had been proved to big satisfaction that the new combined methods raised the level of education of deaf children, tmproved their linguistic oblidies and opened up a wider academic future.

and opened hip a wider academic future.

Mr Doneld Wollman, one of Her, Majasty's frispectors for education, sold that all handicapped school-leavers should be given more advice obout courses evallable in further education and both they and the college staff should be given special assistance in lemning how in minimize the problems edical by the handicap.







# Mighty are honoured

When the immymm achieves sendentic respectability will his jokes become, like learned attenuits to exploin them, merely gruy, dull mid unimmy? Prabably not in the case of this week's licensed jester, Dr Erle Morecumbe, who lends, fram left, this gallery of fannous names from shawbusiness, business, newspapers and politics who received honorory degrees: Mr Erle Marecambe DLitt (Lancester): Sir cambe DLit (Lancester); Sir Dnuglas Hader DSc (New Univer-sity of Ulster); Mr William Rees-Mogg LLD (Bath); Mr Havold Macmillan LLD (St Andrews).

# Universities threaten Schools Council over reduced representation

Will Glasgow

to ceview their recruitment, training end job prospects.

He suggested that the Gavern

"I have no doubt that, even if its faced with opplications from blods of oppress into litherto mederly populated courses, it will:

belong

to them?

Universities and calleges might start setting their own entraces examinations and the Canmittee of

examinations and the Canmiltee of Vice Chancellors and Principals might withdraw its support, a meating of the Schools Council's governors was tone task week.

The CVCP objected to proposals for reforming the council which would mean a much reduced say for higher aducation in the bady respansible for developments in school curricula and sxaminations. The plans laid before the gavernars last week were to replace the present governing cauncil, which has over 70 members, with three separate committees; a widely representative convaccian about 50 strong, a professional cammittee

The principals of Glesgaw's two universities tank contrasting views of the prospects facing this year's university graduates, when they addressed graduation ceremoules this week.

Sir Sumuel Curran, principal of Straticityde University, said the greduntes would go out end croeto prosperity in Britain, running its industry and commorce.

Professor Alwyn Williams, principal of Glasgow University, however, fested that reduced apportunities in teaching could be "disastrous" for arts graduetes and called for a Perliamentery salect committee to ceview their recruitment, trail-

Overseas student ment should support schemes to prepare would-be greduate taechers for commerce and industry. Ho said numbers up by 13,500 last year the poor employment prospects for some sectors of highly quelified university losvers must became a matter of public concern.

Overseas student numbers in Britain increased by 13,500 in 1976 cnmpared with the previous year heinging the new total to 114,000, eccording to figures caleased the week by the British Council.

matter at public concern.

According to previous statistics, about half, of those awarded an MA at Clasgow went to the university intending to enter teaching. The aquivalent of the Jobs Creation Programme for unemployed school leavers was full-time professional and vocational courses and advanced training schemes. The Government should support those an an emergency basis, "In the past the Government has always awarded grants to graduetes registered for such courses. They show that in the university sector more than 29 per cent of oversass students were studying engineering and technology and in the polytechnics the proportion of foreign students in this field was nearly 42 par cent.

neorly 42 par cent.

Subjects in the social, edministrative and business area elso attracted high oversees numbers. In both universities and polytechnics nearly 30 per cent of overseas students were reading for degrees and diplants in those subjects. Twelve par cant of the overseas recruits in the polytechnics and 19 per cent in

solution. Where it is practised of university laval—usually by imposition from outside—it has not pruyad a rosy future awaited. Strathelysts, he said. Their joh was to create sational wealth and presperity on which clucation and the social services depended.

Pessimism was the tage of an address in graduates of Bath University by its chemcaller, Lord histon of Bankside, read in his absence hy Prafessar. Paul Motthows last weak. He pradicted that energy creatents, weak is produced that energy is evaluates in British regional prepara for it.

Will a committee connection and succession of more than 15,000, Iran end Nigerio with 5,000. But Greece, is in the sudent mismbers in British significantly to e now level of 3,300. Produces depended.

The total number of students in the university sector reached 31,800 in the university sector reached 31,800. In the produced in the principal preparation, the principal preparation in the principa

Education and the Cnuncil for National Academic Awards. The plan was to reduce these to eight an convocation with none represented as of right hut with "representetives" chosen by the finance and priorities committee. Only NATFHE to the person from the universities on the finance and priorities are person from the universities on the finance and priorities and on the professional. committee and on the professional

committee.

Dr Geoffrey Templeman, vicechancellor of the University of Kent
at Cooterbury, told the meeting ha
had been mundated by the CVCP to
say that, as major customers for
the products of schooling, universitics should have some say in the
council's affairs. "That influence
should be felt at every stage, not
least where the decisions are
teken."

the present governing cauncil, which has over 70 members, with three separate cannulttees; a widely representative convacotian ebaut 50 strong, a professional cammittee dominated by achoal tencher unions, and o pawerful fluance and priorities cammittee which would inve o majarity of central and lacal government representatives.

These proposels fullow demands from the Education Secratory, Mrs Williams, that the cauncil be reformed to take unnor notice of interests other than schools and to give e bigger say to the DES ond and local collection with the research to the present even of interests other than schools and to give e bigger say to the DES ond and local collection with the council sentantives from further and higher oducation bodies such as the CVCP, thie Associethon of University Teachers, the Netional Associethon and Higher

Teachers in Further and Higher

the present governing cauncil, which should have sentatives from the Education strong the first and the council has to concil and to give a bigger say to the DES ond and to give e bigger say to the DES on the first further and higher oducation bodies such as the CVCP, the Associethon of University representatives from the Rollogal Associethon of University and the council have to a consider their future relationship with this council."

The pressor with the universities have a concil and the surface of this west the decisions are the university sught have of this was the tituture relationship with this council."

The pressor of the reduction in the future relationship with this council."

Prefessor W. R. Wallace, speaking the bushed to a buble to choose what represented them. He wanted that the universities have the decisions are the decisions are the universities.

T

Dr Edwin Kerr, Chief Officer of the CNAA, associated himself with these complaints. The CNAA, he seld, should have a placa as of right an the professional committee.

But Mr Tom Delvar, general secretary af NATFHE, called all this "bleckmall". "It is a revelotion to me that the universities heve a relat of view and have or long last

# UKCOSA chairman calls for new policy machinery

New and stronger mochiusry for formulating policy on overseas students was colled for this week by Lord Gladwyn, Liberal pear and chairman of the United Kingdom

Stating publicly the UKCOSA's demoud for a powerful standing commission to keep ovarsees student affairs under full raylsw, rayealed by The THES lest manth, Locd Gladwyn said: "It is becoming cleorer that what is reelly needed is new machinery for formulating policy on the whole problem presented by the temporary presence of an increasing number of young foreigners in our midst."

Salamon in support overgroot security is a place."

For seasor Williams added that support overgroot security is a place."

For seasor Williams added that support overgroot security is a place."

For seasor Williams added that support overgroot security is a place. The number of students from the support overgroot security is a student of the overgroot security is a student of the overgroot security. The number of students from the support over of the vertice of the control of the support overgroot security is a student of the vertice of th

suggestion that the body should heve e smell "central core" of members able to accelerate decision

noking, has been drawn up.

Lord Gladwyn, who was speaking at the annual mestlog of the UKCOSA in London, warned that the Government's increase to over seas students' feas threatened to financially supple powers at udents. financially cripple poorer atudents from the poorer countries who were in most need of help.

"It remains to be seen what the effect of the final increases will be but it is certain that a considerable number of students in the middle of courses will not be able to finish

Professor Reif Dahrendorf, dicector of the Lordon School of Economics, told the conference that everything should be done to impress on the Goyermment this economic shortcomings and moral injustices of forther increases in

# PEL research project gets £46,000

Science and the Training Services Agency ore to finance jointly u £46,000 research project into the stata of paid educational leave in England and Wales, it was revealed this week.

The two-year project is to be the first of its kind in this country and will be carried out under the ausnices of the National Institute of Adult Educetion and the Society of Industrial Tutors.

Final details of the new scheme were agreed eachier this macth and newly-appointed steering committee, made up of representatives at the NIAE, SIT, DES, TSA, the Con-foderation of British Industry and the Trodes Union Congress will meet

A go-shead for the scheme has come after marly two years of negotietion between the dispartment, the NIAE and the society. The DES is to provide funds of £30,000 and the TSA is to finence the belence.

TSA is to finence the belence.

A rescorch director, research fellow and 30 partitime research sessociates, recruited from the society and from the make of professional adult educators with relevant experience, are to be appointed before an initial pilat survey gots under way in lass September.

The overall objective is to ossess recent provision of paid educational leave in England and Wales. This will include the task of surveying the work of coobling and providing institutions and an assessment of PEL arcangements by sex, occupe-

PEL arcangements by sex, occupa-tion and industry within eight local euthority areas in at least three

An exemination of the attitudes and life styles of students before and after PEL and their "sociel relations" in the light of the ex-

perionce will also be assessed.

The NAIE and the society maintain that the project will provide a link between research studies of courses for industrial workers to those of the political, legel and institutional ocrangements for PEL.

The committee members will include Mr Arthur Stock and Mr Alan Charaley of the NIAE, Mr Hill Hughes, principal of Ruskin College, Oxford, Mr Gerry Meelor, of Middlesex: Polyreclaid, and Dr Colle Fletcher, o research officer et Nottfetsham University's adult education department. Mr Paul Pordlam, director of Southampton University's adult education department, will chair the body.

# Safety query over new buildings Business of cooperation

Modern university buildings will be criticized for their lack of sufery in a new report to be presented in the Health and Safety Commission.

Speaking at a Safety Conference for Universities and Polytechnics at Sussex University, last week, Miss Noroli Carry, a member of the Health and Safety Executive, said she was most concerned about buildings put up in the past 18 years.

Miss Curry's conclusions were the result of a survey into the application of the Health and Safety at Work Act to universities. In the pose year she has visited the univer-sities of Cambeldge, East Anglia, Leeds, Salford, Streenelydo ond

Swansea.
She told the 150 delegates of windows that could only be cleaned with the help of special scaffolding; flot roofs with no protection at the edges for maintenance men who had with the help of special scatfolding; fire was the emp, hard.

Flot roofs with no protection at the edges for maintenance men who had to the health of students in other stairways army from members of the public in most of walls, where people could break a the tenching processes. Arts students in also disposal of hazardous materials.

'Do not turn

clock back

on science'

leg; nrnomental balustrates through which people could slip and fall several floors; glass wills that could be worked through, which happened while sho was in Cambridge; and other bazards.

On the whole were well protected and science students had limited exposure to the possible hazards of laboratory work.

But there was a need to undertake a survey of teaching programmes.

On the whole were well protected and science students had limited exposure to the possible hazards of laboratory work.

But there was a need to undertake a survey of teaching programmes.

On the whole were well protected and science students had limited exposure to the possible hazards of laboratory work.

The Business Ethication Cunneil has cuttained to the ubled.

"There is no doubt that a high percentage of accidents in universiurging delegates to be mare mindful of their service departments. In boiler hauses one of the problems appeared to he insulation and there was still a good deal of asbestus

Fire risks also presented problems and Miss Curry warned that one of the major expenses universities would have to meet in the next few yeers would be in hells of residence where not of the main cross of fire was the chip, pan,

a survey of teaching programmes io laboratories, see what muterial was being used, whether it was essential to use it, and, if it was, to make sure there was odequate training in the proper way of hundling, possibly by including safulaburatory practices in the curricu-

staff might be in laboratories for limited periods, technicians were more exposed and Miss Curry was concerned about die lack of ventila-

tion in some areas.

Research in the laboratory needed continuing supervision. It was important that arrangements for safety rovered all who might be at

On behalf of the CNAA, Mrs Cynthio Iliffe spoke of the need to rotlonolizo courses of business studies and management studies su that students were mught together and could transfer from ano course and could transfer from ano course to snother. Representing the Institute of Bankers, Mr Erle Ginver, is director of studies, recounted the vecent reorganization of qualifications that linked progress through the banking world with courses offered under BEC unspices.

One of the unply concerned to

boiles representing accountrate in slt round the same table and hegin the process of sligning qualifica-

Miss Elliott's theme of coording-

ence last week.

and negotiations were going in to humbler position than the united give holders of BEC certificutes sly degree and are mixious that similar rights. For instance, in similar puth upwards remains business studies, the holder of a open."

Education must not dominate

The fudencedent Browleasting Teachers expresses concern in it

fourth channel, IBA says

higher certificate might gale cutrance to the third year of 1

attempting to scenre its students exemption from professional examinotions therefore it must work by persuasion, Misa Janet Elliott, one of its senior officers, told a confer-It was a tremenious orblevement. for example, that the council had recently managed to get the three

tion was extended at the conference, organized by the Business Education Teochers' Association at the City of London Polytechnic, to cover the mwards of the Council loc National Academic Awards and of a range of professional bodies from hankers to occountoots and the local govern-

There were limits to cordention ond rutionalization. Mr.IF.K. Davenport, an official of the lent

She was selected frum a notional may of 2,000 and fram 26 fundists by the firitish Safety Council which has been holding the competition for 13 years in the belief that o gray girl can to more to promate offered under BEC unspices.

One of the innin concerns of linishing second to say, want to be not set to characters was the relationship hetween the CNAA und the BEC. The former higher national diplomas oud certificates granted their holders access to degree level work and negatively was considered as a considered with the profession, but there are members who has achieved their pushion from a limit of the profession, but their pushion from a limit of the profession, but their pushion from a limit of the profession, but their pushion from a limit of the profession, but their pushion from a limit of the profession, but the profession to the profession t getrotection of work than a fixiful a posters. Her prize is a trip to imedia fur the Chicago sulety waterion and \$1,000 guarunteed

Unless adequate resources were provided for pure science it would be impossible to maintain courses in pure science, medical science, applied science or technology, he

Pure scienco must be defended against those who are interested

orly in the improvement of rechnology, Professor D. Brymour Thomas, Bute professor of unatomy and experimental pathology at St Andrews University, said at the

science graduation ceremony last

applied science or technology, he said.

"We really must be very cureful to ensure that wo do not turn the clocks back and wo must be ever vigilant to ensure thot wo do not allow the clocks to be turned back by others who do not appreciate the importance of pure science in reistion to technological progress and who certainly hove no enthusiasm for pure science devoid of immediate application."

We should not understand heart failure if we did not have detailed information about the circulation of the blood and it was most unlikely that William Harvey would have been oble to begin to collect this information if his classical sindies had not been preceded by the appropriate developments in dynamics.

These in their turn would not have occurred if Gallico and Newton bed not had whe desire and the ability to setisfy their curlosity and done so without being distracted by oftempring to unticipats opplications of their work in medicine or disewhere.

"It is a short step to advocate

isewhere.

"It is a short step to advocate from pure science to technology and to forget that the scope of technology is inevitably dependent upon the scope of pure science."

Professor Thomas sail we were in danger of forgetting that money was not a substitute for ideas. This was precisely whet hoppened when the President of the United States decided that he would provide enough money to sure opposer.

# **Professor** Hodgkin honoured

The long essectation with Somerville College, Oxford, of Professor Dorothy Holgkin, OM, who wen the Nobel Prize for Chemistry in 1964, is to be commemorated along with that of Professor E. P. Abruham, professor of chemical pathology, with whom she has collaborated in X-ray crystallographic work on the structure of cephelosporins.

The EPA Cephelosporin Pund has made a docation of £30,000 to Somervilla, which bringe to £70,000 the amount the college has received

by Patricia Santinelli

The other major problem is conproblem is conproble

which chout 5,500 new volumes and added each year.

In a consultative document intended as a basis for discussion, that all printed accessions were to continue heing held at Colindale, the library would need new bookstacks on the site for 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at a cost of 1980 at a cepital cost of 1980 at

grateful for the timing by Professor Abraham and his fellow irustees of the fund.

of the fund.

It had enabled the college to honour Professor Hodgkin in the year of her impending retirement from her professorial followship and had brought Somoryillo a step momer its aim of achieving by 1979, the year of the centenery of its foundstion, the full endowment of st least one of its retorial fellowships in every subject in which it has tutors. has tutoris.

Professor Hodgkin camo to Somer-ville College in 1928 to read chemi-stry, and when she became o rutorial fellow acted as moral tutor to all college undergraduates resding ony branch of science and taught most of altern at some stage in their courses.

For example the IBA's own edu-cational advisory council recom-mended a better erroy of pro-grammes for school-leavers, includin danger of forgetting that money was not a substitute for ideas. This when the president of the United Stetes decided that he would provide enough money to cure cancer.

"The limited success of the product of the launched endorses the dependence of technical sciences. It will be named the Dorothy Hodgkingremmo which he launched endorses the dependence of technical sciences. It will be named the Dorothy Hodgkingroup on appropriate developments in pure science.

"The limited success of the product of the produc courses.
In 1948, Professor Abrahem and

Why newspapers may go out of print

comments on Annan about its chical standards of current programmes, "It must be a source of concern that some oro broadest which are either humand in their outhick or confirm lamond attentions." Authority has told the Government that if it ron o fourth televisian channel educational programmes would be outlied to a seventh of In its comments on the report of the Annal committee on the future of broadcasting the IBA declares itself against the concept of an

Grentor cooperation between educational histiatalous, broadcasters ond cremors of unilla-visual material would result from the founding of an Open Brondeasting Ambority, the National Closed Circuit Television Association has said in its response. open bracecasting outhority to run the fundh channel. However, h ogrees with Annan that the fundh channel should be used for chuca-tion: education should not domin-NECCTA, which has 248 membert Who should produce educational

In Institutions oil over the county, fears that the OBA will not see the

Who should produce educational programmes for the fourth channel is un open question, the unthority said. "Whether the bost use of the time allocated lies in the trunsfer of Open University programmes or in the creation of programmes to meet different educational needs is a matter the IBA would like to see carefully considered." The essociation denies that the present mould of educational broad-casting is rigid and feels that the committee had insufficient information on the range of resources evolvoble to fulfill the programming needs of the OBA.

"Educational Brosdcosting Is molleoble und can respond to futute developments", the response says, "Many NECCTA members beve on the groblems of the young unemployed ee well es courses in
numeracy end literecy.

If the IBA ran the fourth channel
It would have spot advertising like
ITV end it would cost less than the
epen: authority proposed by Aunan.
The National Associotion of Schoolmosters/Union of Women

# Language assistants' job slump

The future of one of the most comprehensive collections of United Kingdom and overseas newspapers langs in the balance following a recent British Library report recommending that microfilm be adopted for storage in the newspaper fibrary at Colindele.

The need is increasingly urgent as the library contains very nearly half o mislinon volumes and parcels of newspapers and periodicals to which about 5,500 new volumes are added each year.

In a consultative document intended as a basis for discussion, the British Library explains that if all arised accessions were to continue

The number of posts for foreign and colleges for a second year many papers will be dealt with first.

Printed editions of certain cetegories of material would, however, be retained for regular uses at Colleadele. This would cover major national newspapers, earlier volumes in good condition and notable publications with coloured illustrations.

At the moment the plan is to keep Uniked Kingdoni publications which would result in die building being full by the year 2000. However, if overseas material is kept as well, additional sturage would befull by 1990.

The number of posts for foreign and colleges for a second year many nings, it has bit the scheme whitely and colleges last year fell by 25 per cent, occording to the Association of understanding the Association of the Association of the sociation of the second occording to the Association of the Association of the surface occording to the Association of the second occording to the Association of th

"From the prehistoric cave images of stags and hism to the giant hamburgers and baked heart ine, of American popt art, fond has been a recurrent theme in art." Thus thus the black for an exhibition at Kettle's Yard which staff and stochasts out of Cambridge for the summer will be existing.

The organizers claim that this is the first exhibition of fond art in this country and go on to explain that it conforms on two fronts: "as not in government of Western Greece on government of Western Greece on

higher certificate might gain culturance to the third year of a degree course or polytechnic. Mrs lliffe expressed the hope that while allier courses produced by further education colleges in most the same way as the CNAA-by recognizing the expertise and independence of the colleges and their teachers.

Miss Elliott reminded business teachers that the BEC had to said penalty of its myards by keeping in partianal standards. This put a limit on local variotions.

The tenchers at the conference were auxious, too, about the teamer of the diploma in highsr education only whether students holding had not being the condition of the diploma in highsr education only whether students holding had been the condition of the diploma in highsr education only whether students holding had not only whether students holding had been the DipHE of the DipHE.

Here's looking

At you

Being a hecturer lims helped meaning ending content of the DipHE.

There were finite to confesse from ond ruriounalization. Mr L K.

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There were finite to confesse from the prehistorir cave in stages and bisman has neritered in agada mith the stages and bisman has neritered in agada mith the stages and bisman has neritered in agada mith the stages and bisman has neritered in agada mith the stages and bisman has neritered in agada mith the stages and bisman has neritered in agada mith the stages and bisman h notions on two froms: "as art in tastes, satells and perishes; is fined it refuses to submit to any demand that what is callible should be eaten." Do show from July 19 to August 12 will be icing pictures, edible scalpaires, smell pictures, edible scalpaires, and cereminal eating events (for instance, Spaghetti Polotaise in A flat). These will be supplemented by nore conventional works with a food theme. meng a recurrer me nelped me me cope with becoming o beauty queen", cald Julith Plott, n 24-present lecturer in guarral studies and Alice Houstiful Eyes 1977.

About once a week Free 22 However, I have an ulterior

untive in mentioning this exhibi-rion: I was mysolf a paimer of middling to dreadful capacity and have just completed o work which they might like to include: no edible Last Supper. Whenever I hink in other artists' verslings I invariably get peckish myself watching all those people eating. Where mine scores is that it deplets Charlion Hestan and other leading hildiral ligures surrounded by real cup cakes, Marmine sondwiches and sailed crisps. The spectator may thus, if he feels inclined, juin in himself and so partike of the only religious work this convery that also femils off night starvation.



is flesutiful Eyes in sofely leases talks in wurkers.

About once a week East Durset Sechnical College orranges a stand-

o for her classes and Judith pulls en a sash to take a bit of glammin

maines, in return for which she

This involves acting as a cross

into Uritain's factories.

us: troning cheerfully round biblisting lactories and suchlike, filling one minute ond speaking is hunning no truck with all this set up large sense model is hunning no truck with all this sense to any who dure life to whom protective goggles. I joined her at a piston ring may be seened keen on safety with selected keen on safety large platen for a piston rings to talk safety large point habpt, this should be subministic about the subject of their willed in the lodies for your large with the sides of their convenience," East, Samoan roaders with her building ood engineer-large point poin recalled at college. "You be passitive", slic said, only shed straight into the pack, one out one lad who turned out the pack.

the British Safety Council is well and with her work and her cultivated with the pleased with the pleased with the presso who regards it os a part of the presso who regards it os a part of the presso who regards it os a part of the presso who regards it os a part of the presso who regards it os a part of the presso who regards it os a part of the presson who is all accounts rather embarrus.

On the other hand

# That is a dolphin

last time (THES, July 1) I was impairing why the South Bank Polytechnic's crest depicted o purpoir trying to pash a first editing down a suit of armour. Its deputy director, concerned that I was losing sleep over the issue, has written to sort it all nurs.

step over the issue, has written to surf it ull unt:—
from Mr A. J. Bellamp
Sir,—That's no purpulse, it's a dol., plin, known us no accient symbol of kimboes, lave, dligence and speed, oad often associated with towas having a serious claim to maritime roductions. All die more uppropulate then in a polytechnic well endowed with these qualities, structed in a maritime environment. situated la o maritime environment and moreover one which has deve-loned its uwn muritime connexions,

Nevertheless, the writer connot rerull seeing dalphius in the Sanil-wark reaches of the Thuntes, though us a cleunsing of the river praceous and fish return to these reaches, surely would represent a considerable ochlevement for our tume

have the honour to be, Sir, Your obedient servant, A. J. HELLAMY,

Deputy director, Polytuchnir of the Sauth Bank.

# Tram jam

The Jubilee has proved a wonderful opportunity for enthusiasts to mount exhibitions on their particular absession, with only the most throats 1993 link. One of my favourities opened as part of the Kingstin Polytechnic Jubilee exhibition last week: "Royalty and tram-

Deen in the howels of the British Library's uncutalogued moteriol on mony years it hos been known that some search is under wny. Por mony years it hos been known that a smile the safety meshing did oot mant to concer with a smile that would build, a library's she will be a small research tank bos been finding out just how extensive Beck to London for the mony years it hos been three uncompleted o year's stint os just completed o year's stint os like in mony years it hos been known that a smile that would build, a smile that would build, a library's uncutalogued moteriol on library's uncutalogued moteriol been finding out just how extensive it is.

The team's brief is to explore the problems which will have to be overcome in untompting to record, for the proposed Eighteenth Century Short Title Cotalogue, all the BL's hooks, pamplets and curiosities from this period. The illocasions of such an undortaking are awesume, fur there are obout 300,000 such Iteus, making it the largest collection to the world.

The BL claims the newly found ephemera could provide instoriains with Information out to be found.

# The problems of German universities



### Ralf Dahrendorf

Berman universities have been in

the news recently, at least in the higher chucudon news, and that for higher chucudon news, and that for two revsnus. One is, a report about German universities by the Cumicil on the Fature of Universities which paints out the degree of politicization that has haceme characteristic of some departments in several universities. The other item has to do with what The THES and some of its remiers refer to as the Bruisverhot for young are demics with o "radicol" record in the German Civil Service.

The two ore related, at least in the migals of some publicians, but I

the minule of some pullticians, but I would to address myself today to the thing in andress myself today to the latter, and discuss four questions. What is it thout? Whot is wrong while h? What has gone wrong to bring it about? What can be done

What Is the so-called Berufsperket What is the so-called Berufsperlat about? The facts are simple, although rarely stated. Along with officials of rentral, Land, onthoos government, mony other groups in Germany have the status of civil rervants, or tather, Demnie: railway and post office employees, for example, and school and university teachers. The rates applied to all of them—the surdies of the rails. of them—the gardoner of o glty cemotery and the university lecturer in liotany, the oughte driver and the personal assistant of the federal chancellar, the research assistant and the sacial worker include a test of loyalty to the con-sitution. (And it is, which ono should not forget, a very flomo-rratic and liberal constitution.)

In oddition to on ooth of loyalty, this has involved, for some years, no lovestigation of past activities in the case of notiversity graduates. this investigation has brought up, and made relevont, information of membership in student sucletics, participations in demonstrations,

ssy first of oil that it is probably agreed among most people it is probably agreed among most people it at one would not wish to have declared enemies of a society employed in the top administration of it. A fascisc of the right or the left who believes that Parliament abould be obolished is hardly a suitable caudi-

date for permanent secretary in the Home Office.

But of course the problem in Germany is not this. Let me just list its most flagram damers, biss, the German system of resting loyalty to the constitution lumps together the most diverse arcupa-tion and applies a principle which

the Civil Service proper to other areas of the Civil Service proper to other areas which have nothing to do with administering the constitution.

Secondly, the system of testing the "constitutional bryainy" of the individual backets. individual leads to mas, investiga-tions which are horrible in themselves and are hound to produce a climate of fear and subservience un the part of those hable to be in-

the part of those habit to the investigated.

Tilrilly, if one milds to that the kind of hysteria which has become characteristic of several Western societies one is bound to suspect rulianities out all dissidem views talchingh there is Eule evidence that this has in fact come about in Germanyl.

Germanyl.

Whot has gone wrong to belog thout such a system? In the first place of course the extension of Civil Service privileges (and obligations) to groups which are not really part of the Civil Service. But there is such as a course there is such as a course there is such as a course which are not really part of the Civil Service. But there is another paint and an impartant one. The present system of resting constitutional loyalty is the absurd sido effect of Chancellor Brand's attempt to liberalize on existing practice.

There is a roof lesson to be learnt here. When Willy Brandt Inaked of the canditions of entry into the Civil Service, he found that some people were debarred because they were members of certain arganizations, occ-Nazi and Comounist Purties. He deridd—and with other filterals 1 was entirely with him or filterals I was entirely with him on this—that this type nooseuse, not that what really mattered was whether an halividual actually intended to subvert democracy.
This sounds flue, and ne assumed

of course that it would lead to a considerable liberalization of existing practice. It did not. On the contrary, now than infividual motives and actions mattered, an enormous system of investigation for a Civil Service job had actually shore before-and that generally more before—and that generally meant, as a syndem. As a result, the organization with the emphatic name "Protection of the Constitution" (Performerschatz) began to build up hundreds of thunsands of files, and increasingly the lines between subversive activity and any kind of political activity became hunred.

what can, what should be done to change things? I have tried here to explain a few things for which there is little space in most news-papers, but let me leave no doubt abunt my position : the only mawer is that the thousands of files which I have tolked obour must be destrayed if the climuse of suspicion which now prevalls to universities and elsewhere in Germany is to be dis-

this investigation has brought up, and made relevont, information on membership in student sucletics, participations in demonstrations, and the like.

Over the last five years or so, severol immdrod thousand individual cases have been invostigated in this manner. Whenever o Beomber is first employed, a form is sent to the Ministry of the Interior to find out whether there is any ovidence "ngainst" him or her. If there is, omployment may prove difficult or impossible, it is need to be considered "constitution ber of people not employed bocauso they are considered "constitution this is relatively small, probably faver than 500 in all bledgy ore four million people in public sorvice (and thus at least 100,000 oew officiols coch yeor).

Whot is wrong with this systom? A lot is a reconging most people ribat on a feet.



Why a Shetland rock will

become Mouse Island

# LETTERS TO THE EDITOR

# Wider approach to educational broadcasting

Wider approach to educational broadcasting

Six.—Mr Gratten and Mr Robinson of the BBC calication department of the BBC calication and a simplified to an utaker. Questioning teachers may approach it describes on the binding the domestic of the simplified carriery in developing carnilative knowledge carriery. This approach i describes on an about the case of the carriery of

numbers to a point where descrip- | Dance degree tore like "strongly represented"

is to start elsewhere. The confu-

sion may have arisen because the

year of their course me other stud-

of the concepts and problems of

ford College.

It is not adequate, in oblition, to stress the foct of multi-cultural studies at Bradford College, without also noting that there has been a move to bose the education of teachstudies at Bradford College, without tenther trolling can be summitted as noting that those has been a in a wish to anacy the ket move to bose the education of teach tenther trolling that the ket move to bose the education of teach tenther trolling that the ket move part of Bradford College in a coatext of studies of multirocial society in the other colleges at Bingley and Ilkley. Indeed I has noted this, even if you have token part, as a governor of Bingley College, in a course un auditracial studies there.

Further, you auggest that the partner of Sociology, council has been motivated more by Leeds University. Sir,-Tha first degree course in dance began at Middlesex Polytechnic in September, 1976. Frances Gibb presents mishnformation (THES, July 1) In seeding that It

In the first special s

first three-year trained students emerged from the colleges.

Your lender writer may hose the we will brush uside the past at it had novor existed, he may be right to think that this kind of may he right to should happen, but it all not happen. A great deal of his work of the last decode in teacher clucation has been valuable. So that it is now to be used, as to keep the college of the last decode in the last year of their course are other stud-ents studying drama and music. period of stability and opportunity Some elements of the course ore to work with known resources and taught in common, allowing a lively lattraction, and an understanding licen o part of oll agreements on teacher education negotiated in teacher education negotiated in ACSST and by individual teachers' performance ort. All the studies
Frances Gibb describes are already
established at Middlesex Polytechthat the is a time for four-year
that the is a time for four-year

of course we need change and progress and hard thinking and new experiments and of course he new experiments and of course he new experiments and of course he will be considered to the course of the

established at. Middlesex Polyteche net. dance account that is a time for four-year duchous, mesthetic and critical eludies, and the history of dance, are all required studies for that disperse student.

Among the 56 optional courses, are mime, period dance, the contemporary London dance are mime, period dance, the contemporary London dance are mine, period dance, the contemporary London dance accompanimum, dance in the community, repertore, and for those with wider intorests, to clear on the professional, belief and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and for those with wider intorests, to clear on the professional and practical side of training hos been an interpretation of the form which each student chooses, are all fill the work of same 20,000 profession that the work of same 20,000 profession the professional and practical side of training hos been an other work of the work of same 20,000 profession that the wor

### Bradford confusions

I am sure that the local autor

he Clice Cankson scicace correspondent

Now the Namerid Environment Re-

Now the Named Environment Re-search Council has given Professor-berry a £14,741 grant to set up his own inice island in the Sher-louds he order to study, for the lirst line, the extremely rapid genetic changes that occor in the first few generations of isolation when ca-

vironinental stresses are most

World Wor under the ouspices of the department of clvil engineering. But it was from the university's active faculty of commerce and social science that the atimulus came for research into city life. An influential figure direction research into housing and plonning in the West Midlands in the 1930s and 1940s was Professor Philip Sorgant Floreace, the well-known student of industrial locotion.

Wor under the ouspices of

of industrial locotion.

One focus of loterast emong university social scientists in the 1950s was the building of new towns os a solution to the problems of housing and industry in Birmingham ood lands Now Town Society was lounded, and from ft grew o moke lands unit led by Dr Dovid Eversloy, as economic histories on noving into planning and urban analysis.

The unit published such works as Population Grouth and Planning University.

The first Ten Years 1966-1976, J. G. Smith Building, Birming and University.

boost for leisure planning

project, and that population is now existed, because the living area was too small and too barren. He thinks the larger island chosen for this year's introduction should be able tive hundred inhormory mice me starting a new life on an unin-habited island off the Sherbands this labited island off the Sherbards this summer. They are all generically identical, the results of crossing two highly inbred strains of limite manuse (one black and one brown).

Professor R. J. Beery, professor of genetics at the Royal tree throughful Medical School, has been studying the mice populations of small Islands for 20 years. He has investigated the genetics and ecology of the distinctive vaces of once living on Skokholm off the Wolsh coast, an iropical islands in to support a permanent population rouging from perhaps a thousand is the summer to a hundred in the winter. Thice will be released on two or these are glabouring islands next year.)

ago in a feasibility study for

The generic make-up of the original 500 mice is known, and changes in seven porticidar genes will be noninored by visiting the island every month or two, trapping the mice, taking blood samples and releasing theor agolu. The genes will be detected by moone of the onice living on Skokholm off the Welsh coast, an impleal islands in the Parific, and on Islands off Amarctica. But these are all established populations resulting from chance introductions by man for instance, the Skokholm mice are descended from three or four that escaped from a pile of sacks brought over by Welsh rubbit-catchers in the 1890s). will be detected by means of the analytical technique of electrophore-

in all the man with the jub of landing in the island—which may be have authors in winter—and caching the unice is Mr John Fu, o Gibrodurlan PhD student, He will be based at Aberticen University's zoolocy department, where Professor George Donnet is collulorating to the stude.

while Prolesson Berry concentrates an emeric changes, Prafessor Dantet will keep a close watch on the coology of the mouse pupulation: Its size, age and sex structure and its life style. The two profes The Island chosen is one of grass and heather-covered group indicated characteristics to economically in size from 20 to 300 neres.

Professor Berry lopes to onswer by the mainland of Shetland.

Professor Berry lopes to onswer will supersided question. hers hape to rolate variations in inherital characteristics to ecolo

ranging in size from 20 to 300 ncress, west of the mainland of Shethard.

At present they are inhibited neither by humans nor by mice, and the environment has been chosen because it is learsh coungh to put the genetic pressure on but on sufficiently serere to kill off all the onimals.

Professor Borry released a human stress theorem and the configuration of the control of genetics: how much are the large variational from the chance assurance af genes corried by funders, and how anchor to the raphi aftersion of the the onimals.

Professor Borry released a hundred pairs of mice on a 16-neve mental pressure?



ment Studies. "We grow up us a contract-research organization focusing upon problem aveas: upon their nature, their definition, and on the floding of possible adultinus.

"The institute changed its focus frum pust-experience teaching to reacorch os well as teaching. Research focused upon the processes if government, management and odministration, rather than the prefile by step we in the centre is love seen the need to link problem oreas to processes of government dealing with them, just as the institute has facreasingly hed as the institute has facreasingly hed.

Australia.

The 1.2 metra aperture Schmidt telescope (top) combines high quality optics, outenastic guidaocc aystems and special techniques for houdling photographic plates to moke it the most powerful astronomical canero in the twovid, able to aurvey large volumea of epace to much greater distances their over before. It was built by the Science Research Council as a unational facility for British university astronomera and it is run by staff from Edinburgh Royal Observatory, who go out to Australio on three-years the felescope has

with the few moderately large telescopes that have been available in the couthern homisphere".

The telescope has two main uses. One is survey work for on other the southern sky, which is being produced na a companion to the northern hemisphare survey by the fairous Palomar Observatory in the United Statos. The second is to provide photographs of particular objects or reginus for individual astronomers, and so for plates have been taken for nora than o 100 transcribing the Nature Conservatory, and the Forestry Commission.

Apact from these projects, research goes an in a unmber of niture ways. Work on chiring oud transcribing the Nature Conservatory in the Nature Conservatory, and the Forestry Commission.

taining more gas than any other known—it contoins, a mass of hydro-

# East Anglia study of old Norwich

hy Frances Gihli

Three major research projects have been mider way at the Centre for East Auglian Studies at the Univer-sity of East Auglia ducing the last

year.
The Norwich survey, which has been the mainstuy of the centre's activities, has managed to attent support from three sources; the cultivities the design of the control of

support from three concest the culrersity, the city (move than £8,000)
and the Department of the Environment (£12,000).

Under the direction of Mr Alan
Carter, it involves conducting excavations in Norwich dealing with
the late Saxon and sixtneyth and
seventeenth-century town, and
writing up results from earlier excavations.

writing up results from earlier ex-countions.

Pive shes have been or are in the process of being excavated, pro-ducing important new evidence of the Middle Saxon 1654-850 an) town, the development of suburbs in the thirteenth century, and the topo-graphical and social effects of a doubling of the population between 1580 and 1630.

Unfortunately, the contre's annual roport says, it has not managed to

roport suys, it has not managed te attract sufficient funds for research on standing buildings to oratch the research on the archaeological side. research on the archaeological side. Without this atoney the researchers feel that the survey is incomplete. The second major project, the cural transport and occessibility project, is also linanced by the Department of the Raylandment. It has been countlessioned to examine the socioeconomic effects of the variations in creat transport and survey and in rioal transpuri and service pro-vision, and in advise on the rela-tive merits of alternative policies which might imprave the accessi-bility enjuyed by rural residents.

During the year the teem has produced four interior reports, senting our the translate of research in Northly in general and in the North Wolsham and Burford/fligham areas in particular, which was focus sed particular, which against our sed particularly un the naturo o chango in rural areas and residents change in rural areas and residents' response to change, on the range of palley alternatives, the administrative and fluorehil constraints which impede policy changes, and the anathodological questions implied by dovising and evaluable polleics.

But the report notes the problem of securing autside support for such projects. "Since the very few staff of the centre connot be expected to gain contracts on a rolling

pected to gain contracts on n rolling lasis, we have to find ways of encouraging relevant regional (espectally interdisciplinary) rescorch to look to the centre as an oppropriate and hencicial home."

The third research progremme is the Norfolk tourism project, Iknon-ced by the Sir Philip Reckitt Edu-cation Trust, which is designed to study the advantoges and desadvantages of tourism to the local com-

research programmes.

A recent discovery is the progress, with the help both from thing more gas than any other University of Washington in

America.

Members of the centre olso serve known—It contoins a mass of hydragen os great as all the atars, dast and gas togother in our own Milky Way galaxy.

An apparently iosignificant Cayton, is a member of the East Anglia Economic Planning Council able to aurvey largo volumes of epace to much greater distances thou over before. It was built by the Science Research Council as a untional facility for British university astronomera and it is run by staff from Edinburgh Royal Observatory, who go out to Australio on three-yoar tours of duty.

For three years the beloscope has been systematically scanning the southern skies, aurveying regions that, according to Amorican astronomers.

The telescope bes also discovered the region in o variety of capacities. The director, Professor Keith Anglia Economic Planning Council and et al. Spring Edinburgh Royal to be overy rare dwarf galoxy and ona of the Milky Way's nonerest neighbours in space. The carino dwarf is the first of its typo to be discovered for 20 years, despite systematically scanning the southern skies, aurveying regions that, according to Amorican astronomers.

The relescope bes also discovered the region in ovariety of capacities. The director, Professor Keith Anglia Economic Planning Council and et al. Spring Economic Planning Council and et al. Spring

Sir.-Correspondents wishing to counter recent claims about Marxist blas in sociology really ought to ba mora caraful in their selection . of comparotive examples if they are to evoid providing their opponents' cosa with implicit sup-The letter from Cressay et al. (THES, July 1), for example, to conclude that the following highly mis bave been really scraping eround in leoding remark: "Wa do not read a burrel which turned out to contain of ethnomethodological bias' in tain little other they various wingour columns of though entime. port. The letter from Cressay et al.

Sociology's minorities

my failure to componend the aumerical implications lavelyed in their use of terms like "strongly represented" and "mony". But o more likely answer, I suspact, is a confusion between strong influence within the discipline, which othnomethodology has certoinly had, and the strength of representation within the profession, which it equally corteinly has not. Thus, a dozen would be a generous estimate dozen would be a generous estimata currently in amployment.

of the number of tenured ethno- Hopefully, however, members of

tional analysis were first developed. Stakniam.

### IUC and British Council

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F

Sir.—We, at the IUC, continue to be haffled by your reporter David Walker's persistent integration of the main organizational recommendations of the report of Sir Michael Swano's working group on British Council.

Walker, espacially indicating the contents of the chairman's the contents of the chairman's raport says': "[The Swahn Raport] had advocated the absorption of the Chairman's raport says': "[The Swahn Raport] had advocated the absorption of the IUC into the British Councils."

Northern Renalssance Sir.—Your account of Stirllog University in the IUC into the British Councils."

Northern Renalssance Sir.—Your account of Stirllog University in the IUC into the British Councils.

"niony" could begin to look

possibly appropriate. Viewed in this light, the choice of ethnomethodology as on example of a sociological tradition which purportedly receives fairer treotme ot than Marxism scems to be re-

are thoulology is strongly represented in many sociological departments."

It may be, of course, that any puzzlement obout what methods of eperotionalization and stotisticol reasoning could possibly hove led to such an observation stems from my failure to compeohead the

of the number of tenured ethnomethodologists in British university departments of sociology, and tha "many" departments in which this "strong" representation is to be found can be comfortably counted on the fingers of one hand.

As far as I know, things are not much different in our other institutions of higher education, nor even in the Unitad States, whare the commendation of the fingers and the fingers of the principles of the fingers of the principles of the fingers of the principles of the fingers of the fingers of one hand.

As far as I know, things are not much different in our other institutions of higher education, nor even in the Unitad States, whare the principles of the fingers of the finge

tional analysis were first developed.

Some aliant increases in my estimates could naturally be generated by the choice of different operational definitions, but it would be difficult indeed to bump up the Wolfson Collega, Oxford.

Tomates could naturally be generated MAXWELL ATKINSON.

Senior research fellow in sociology, Cantre for Socio-legal Studies, Wolfson Collega, Oxford.

Senior research fellow in sociology, Cantre for Socio-legal Studies, Wolfson Collega, Oxford.

organizational errangements tha Youra faithfully,

ciated progress.

A great dan of this progress may well be due to three main cousts, Rolla College, the eddition of a third year to Exmouth, Deyon;

the contents of the chairman's University Council for Higher report says (paragroph 12) × On say

animal production and health at Aberdeen University, has been armointed to the chair of agriculture or the University College of North Wales. Professor Owen succeeds Professor I. A. M. Luces who has been appointed prin-cipal of Wye College in the University

Professor J. W. Blake, professor of history, Professor Paul Christsphersen, sor of English, and Pratessar professor of English, and Professor V. G. J. Sbeddick, professor of social anthropology and sociology, all at the New University of Ulster, have each

### Appointments

### Universities

Bath
Pronotion to reader: Dr Bridget I.
Buker (unimal physiology). Pronotions to senior leceurer: Dr C. Chatfield (mothematics); J. O. Lews (modern langoages); Dr P. H. Redfern
(pharatecy and phormacology).

Promotions to reader; Dr D. M. Ramsay (geology); Dr P. G. Wright (chemistry). Senior lecturer: K. C. Ronkin (orthopaedic and traomatic surgery). Productions to senior lecturer: Dr C. M. Brown and Dr B. J. A. Nowosielski-Slepawron (blological sciences); Dr J. S. Davison tphyslology; Dr R. K. Dhir (civil engineering); Dr D. J. Fry and Dr R. R. Starrock (material); Dr G. S. McKov (dental saccery); Dr E. S. McKov (dental saccery); D. E. Ward (English). Innatonty); Dr G. S. McKav Idental successy); D. E. Ward (English). Demunistrator: Dr J. C. Campbell (anatomy). Research fellows: Dr P. Kenst (natheomitics); Dr C. G. Swift (pharmacology and therapentics). Titlor: C. Blake (centre for medical education).

Serior lecturer; M. W. Forth (psychlory). Lecturers: J. G. Aspin (Freuch); A. M. Bowie (Greek); H. R. Eliiott (obstetrics and gynaecology); B. M. Gibbs (building engineering). Temporary lecturer; K. G. Prosihara (medicine).

Mr Philip Rhades, director of the Reg-Ional Postgradone Institute for Medicine and Deatlarry, and postgraduate dean of the medical school in Newcastle

tr Ronald Harden, senior lecturer in the department of pharmacology and theropeutics, and director of the centre for medical education at Dandee this versity, tas been appointed to a per-sonat chair in medical education from Occuber 1, 1977.

Dr John Lamberl, reader in mathematics at Dundee University, has been appointed to a personol chair in comercial analysis within the department of mathematics, from Ortober 1, 1977.

Promotions to cender: R. A. Cardwell (Hispanic stodies); D. J. A. Cole (aufact production); R. L. Hudson (mathemotics); W. S. Moore (experimental physics); R. Rudhetn (physical chemistry); M. Torid (archaeology); B. Tuck (electrical and electronic electronic).

Oxford Oxford
Usting research fellow: Professor
Erich S. Gruen (Merton College). Grinfield lectureship on the septimagint:
Aevoldo Dante Monigliano. Lecturers:
R. S. O. Taodiu | Late Roman tilstory);
P. Crone (Islamic history); H. C. Jenkyns | Igeology); P. McDounell (appilled
social scudies); T. F. Cibbs (fine art).

social scudies); T. F. Clbbs (fine art).

Rendling
Titles of reader: G. R. Stricklond
(French studies); Dr C. M. Hamilton
(engineering and cybernetics); Dr
R. W. Shaydon (agricultural boldiny).
Titles of senting lecturer: Dr. J. G.
Landels (clossics); Dr M. W. Dick
(fromany); J. E. Thomas (genlogy);
Dr G. IV. Green (physics); Dr Marharle K. Jeacock Iphysiology and blockeonistry); Dr Ellzabeth Johnson (amlogy).

St Andrews Promotions to reader; Dr G. A. Con-rell (physhology); Dr E. R. Pitest (applied mathematics); L. F. Steven-son Hogle and metophysics). Pro-motions to senior lecturer; J. A. Per-guson (physical education); Dr J. D. Morthi (Old Testament); Dr A. L. S. Smith (physics); Dr W. G. S. Stephiens (physiology). Lecturer; Dr Paul Mag-dallup (Medioeval history).

### Honorary degrees

ctne and Dentistry, and postgradurite dean of the medical school in Newcastle University, has been appointed in a personal chair in obsterics and generated cology.

It Ronald Harden, senior lecturer in the department of pharmacotogy and theropeutics, and director of the centre for medical education in Dimines (Init). National Physical Laboratory.

District Professor, Since 1975.

In University is the University of Sinsex, Since 1975.

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Onlice and Director of The Industrial Suciety; Sir Ernst Combridge University in the University of London sheet 1967.

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DSciEcon): Professor William Baxter, professor of accounting, London School of Agriculture Advisory professor of accounting, London School of Economics, 1947-73.

LLD: Mr Brian Ball, a member of the rootell of the university and lite University College sisce 1934.

DD: The Most Roverend and Right

MA: Mr Henry Burtt, a member of the School of Agriculture Advisory Compilere since 1936; Mr E. W. Pusoid, a governor of the Pasoid Research Fund.

LLD: Professor A. D. M. Greenfield, dean ut the university's medical school since its inception.

Director, health education project: R. Hoste. Assistant director, physical recreation; Miss K. Yadt. heptity transfer : D. C. S. Roberts (physical recreation). Lecturers: Dr. R. 1. Ferguson (environmental stootes); K. W. Wilkelam (piddisophy). Research assistants: Dr. H. P. Stoot (atomagement science and fechnology studies); Miss C. Cavanogh and Miss M. Wilson (sorthology). Spasish language sessistant; J. Gonzalez Holguera. Strathelyde

Promotings to render: D. H. Brown and J. M. Ottaway (pure and applied chemistry); J. M. Filat (modern languages); J. Spesce (mechanics of materiols); D. Comersu (Strainclyde Business School), Lectorers: A. Godfrey (applied microbiology); A. Holt frey (applied nicrobiology); A is frey (applied nicrobiology); A is tellid engineering); N. M. is tStrallirlyde Bushiess School) McKenzle (Scottlsh Universities search and Reacts) Centre).

Sussex
Chalman of the Council; Dr Leslie
Farter-grawn. Vice-Chalman of the
Council; Mr David gunkor, Pro-vicechancelibr; Professor R. Mason. Chairman of education; Professor Norman
Mackensle. Directar; Ibr R. W. West
ISchool of Education; Deons; Professor R. J. Aodrew (School of Blulogical Sciences); Professor Margaret
McGowon (School of European
Sindies); Mr J. S. Whilley (School
of Enallsh and American Studies); Professor P. J. Bayloy (School of Engineering and Applied Sciences).

### Forthcoming events

tton Staurt Binneh, Archbishop of York and a pro-chancellor of the university. 186: Prafessor Sir John Cornforth, Nobel laureate in chemistry 1975, Ruyal Society Research Professor, University of Sussex, Since 1975. Marketing Practice in Public Transport ' Is to be held from July 18-21 at Cranffeld Institute of Technology. The course deals with the practical applications of the marketing approach to public transport operation, and will incorporate six or seven case studies. Fee: £15d. Purther details from the Short Course Administrator, Centre for Transport Studies, Cranffeld Institute of Technology, Cranffeld, Bedford MK43 DAL.

"American Tsinling 1908-35", 1 we rey exhibition selected by France Allium Brown out organized by the Arts Council, con the seen from Airm 19-September 11 of the Royal Sentia Acodemy, Edinburgh, where it will part of the Edinburgh internation feathwil. It will miss include the ware of American photographers. From Section 19 of the Ingrand Galtery is

All that's new in medical laborators

The Sixili Cranfield International Conference on Mechanised Information Storage and Retrieval Systems, organized Joinily by INSPEC and Cranfield Institute of Technology, will be bed from July 26-29 at the institute. Speakers Include: Mr II. R. Astull depay illurarian, North Staffordshire Polytechnic om "Co-operative Information Retrieval Projects in a Polytechnic in "Co-operative Information Retrieval Projects in a Polytechnic on "Co-operative Information Information Sciences, Using and Information Sciences, Using and California on "Teaching achie retrieval systems at UCLA". Fig. 552 or 535 without occumulation Further details from Mr Cyril Chardon, Cranfield Institute of Technics, Cranfield, Bedford.

"All that's new in medical laborater science," an exhibition, on! "Live or an exhibition, on! "Live or anstrom doad persons", a public he inchare, me that events associated with the institute of Medical Laborates Sciences Trientalal conference to be held in Liverpool Polytechule from Angust I in 5. Along 100 composit mill demonstrate a wide range of equipment of the exhibition in the universe students union. Admission is free by ticket from Alex McMain, direct of external relations, liverpool by treshuly, Liverpool L3 3AF.

# Can the copyright laws cope with the copy machine?

present system.

Francis Gibb looks at the Whitford committee proposals on the law of copyright

The Whitford Committee on the law of copyright and designs, which reported in Merch, is now collecting reported in Merch, is now collecting comments on its recommendations. They have reide-ranging implications for educational institutions in the use of printed works, undiovisual materials and computers, and taisa questions about the role of libraries, publishers and the ownership of intellectual property.

The silmulus first time in February 1974, was the cheos surrounding present copyright law. Since 1956, when the present Copyright Act was passed, the surge of new printing technology, and in particular the ubiquinous photocopying machine, has made the law lorgely

far the ubiquitous photocopyling

inachine, hes made die law lorgely irrelevant.

Literary espyright, as opposed to that concerned with films and susic, springs from the days when printing was invented, and means the right to print from copy the original manuscript. Until then, copying had ust been e problem, as works could only be reproduced with great inbstiousness. It constitutes the right of suthors to receive sume reword for suthors to receive sume reword for such as a copying would be allowed. Tha committee excepts there is no fair twuy of making nucltiple capies without asking publishers for permission, and that that is not practicable. So it has proposed that those who anuke the copies will have to poy a for them. "It could change the laws we have all become our swn is primers."

copying and unterested to represent control of the policy of the provided from principles: the right of subnrs to receive sume rewerst far drief work, and the right of the produced from the right of the produced from the right of the provided for the produced of the produced for the produced of the principles of the public to the agreement of the public to the agreement could be relatively recurrent that for their living, end ensured with preventing publishers from the first time that literature could be relatively free.

The line was essentially concerned with preventing publishers from the first time that literature could be relatively free.

The line was essentially concerned with preventing agrecies would be set up from the solic thing sign the Berna Conversion on international copyright.)

Mr Bernard Williams, alfacetor of the National Representation of Line of the produced of

As a result printers and publishas a result printers and publishas a result printers and publishas claim, the publishing profession
being undermined. Acedemics
and libraries no longer buy jourlies, they simply make photocopies.
The point is disputed by some libaries, and in particular the British
cas of the lurgest users of photocopiers. Some 60 per cent of ellstatus a year are photocopies.

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but Maurice Line, director of the
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copying would be allowed. The com- lar example, publishes a synapsis of the articles subnutried, keeping a lull copy of the articles su microficle. Copies of these can then be ordered by the readers.

ECONOMIC

Both specialized and general circulation journals suffer under the

be ordered by the readers.

Another copyright problem is the question of ownership. The present haw is hazy and the Whistord Committee report makes little difference. In a recent case at the Open University, a lecturer disputed the university's claim to copyright (and a in this case to world copyright) and the owner some course materials she had

# Disabled, disadvantaged, but not disinclined

Sue Reid reports on the lack of educational facilities for the adult disabled

Education provision for physically handicapped edults in Britain is sorely lucking despite the high level

former students and press edvortisements", it claims.

Consequently the physically han dicapped individuals most likely to know about adult education classes were those leest isoloted from the community and those who had enjoyed a formol education.

"It would be naive to suggest that there is no longer a demand for special classes organized either ing to provide in education its ingesting to provide in education.

that there is no longer a demand for special classes organized either by the education department or by social services departments", the report says. Twenty-four per cent of those interviewed who were nut In higher education it has been difficult to decide what is in the course of employment. Mr Harry Bloom, a jaw lecturer at the University of Kent, argues that one definition is whether the author produced the work as an integral part of his dutors and whether failure in do so would heve been a breach of his contract of employment. Lecturers, therefore, intwo traditionally kept the copyright of their lecture notes, because they are principolity witton for their own convenience.

In practice, too, alkinutch possibly and in law, universities liave inhawed students to return the copyright of the work is done under specific instructions to contribute towards o particular Open University's copyright of the work is done under specific instructions to contribute towards o particular Open University regramme.

Mr Geoffrey Crabb, the rights developmont officer of the Council for Educational Technology, says the Whitford committed has done little to clerify whet is a cloudy area. But it does suggest thet where the work is produced in the correct of employment, the employer has the conversed to the more than the course of employment, the employer has the conversed to the produced of employment, the employer has the conversed to the course of employment, the employer has the conversed to the produced in the correct says. Twenty-four her of those intervlewed who were runt for those chet the united log in this type of cless. The special class will served to mitted to join this type of cless. The special class will be reducation class. But the assumption that the discast on the subject of the special class will be deven in the copyright of the special class will be caused in the officer any provision of the sample of the sam

know that their local authority ran edult education closses compared with 46 per cent of the group aged between 65 and 75.

All of the disabled interviewed who had sitended university, college of education or polytechnic and 70 per cent of those who had attended a college of further education knew of che possibility of receiving more than and the physicalty Hudicapped Parson, by Diana H. Mohr. Published by the Dioabled Living Foundation, 346 Kenslogton High Street, London W.14, E2.

education in local classes. Ilul only 45 per ceut of those who had left school before or on their filteenth birthday knew of local provision, the

report reveals.

It adds: "Bolli men and fromen siressed the educational and vocational benefit of class attendance. However, the cromen were more likely to lay emphasis on developing new interests, wanting to meet now people and being lonely and bared."

The report found that wichin the urce of special education for adults the corricula were extremely limited. Social workers are criticized for fulling to goldo disabled clients towords axisting educt education facilities.

The recent also method to make the content of the country of the country

hundicapped edults in Britain is vorely lucking despite the high level of demand from potential students, a sindy published by the Disabled Living Foundation has revenled. It shows that of 266 physically hundicapped people interviewed more than holf were not even uware that ordinery adult education classes axisted and of those ast attending 40 per cout wanted to enrol.

The study strongly criticizes adult education departments for failing to mind is practically hundicapped person in mind is practically hundicapped person in mind is practically hundicapped person in mind is practically non-existent. For the disabled respondents, occasibility prohloms did not rate as the largest difficulty to be overcone, and, far the less severely disabled, it certainly could not be curied at deterrent in enrolling in classes. But mlnor obterations is increased untherity, individual inquiries voluntery organizations, forms students and press edvortisements ", it claims.

Causequently the physically handicapped adults into the local untherity, individual inquiries voluntery organizations, forms students and press edvortisements ", it claims.

Causequently the physically handicapped adults into the education for adults within the report found that within the report found that within the corriculae were extremely limited. Sociul workers are criticized for foiling to golde disabled clients towards axisting education for failing to golde disabled clients.

The report found that within the corriculae were extremely limited. Sociul workers are criticized for foiling to golde disabled clients towards axisting education facilities.

The report found that within the corriculae were extremely limited. Sociul workers are criticized for foiling to golde disabled clients towards axisting eduction for foiling to golde disabled clients towards axisting eduction facilities.

The report found that within the corriculae were extremely limited. Sociul workers are criticized for foiling to golde disabled clients axisting to golde disabled.

The repo

and ellort the Government is willing to provide in educating its disadvanteged eltizons."

"If educational priority is not

given to improving edult education facilities, no amount of goodwill is going to solve the practical difficulties of giving a disabled adult the chance of puricipating fully in the potentially enabling environment of on adult education insitute."

the ", the report ractus.

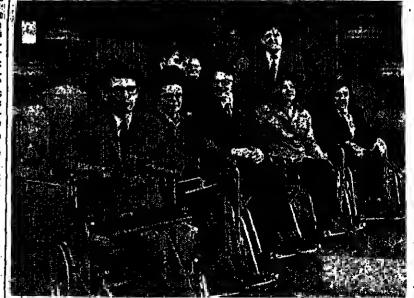
It recommends that local authorities realize their legal "obligations" and make provision for improvements and alterations to buildings and irrusport to classes. It elsa calls for universities, polytechnics and colleges to be more aware of the problems of disobled people in adult education and take

Local authorities should give "ective oncouragement" to allow the disabled to ettend ordinery closses and principles and staff of eduit education centres should be bade energy was a file possibilities. made more uware of the possibility of enrolling disablod attulents and try to aid their integration into edult education classes.

The report adds: "Information on classes should be displayed in

pleces where disabled people ere likely to be found end social workers should individually become actively involved in ancouraging handicopped paople to join classes.

"The handicapped school leavor must, ir concludes, be fully informed of local opportunities in



Disabled adults visiting the Polace of Westminster; what are their educetional upportunities?

# Open University programmes July 16 to July 22

Saturday July 16

40 Chingles onalysis: The Galcuns of Residues (NESS): programming the Arson Luundslion (1205; programming training to the Arson Luundslion (1205; programming training to the Arson Luundslion (1205; programming training training

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11.25 Images and information i Holography al Wosh (8 r23); seed 10.

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12.16 Torporgs (334-; prop 11)

12.16 Torporgs (334-; prop 11)

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13.20 Horography Victorian Missister (342); seed 2.

13.20 Horography Victorian Missister (342); seed 3.

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13.20 Horography Victorian Missister (342); seed 3.

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14.20 Ecology: Description (342); seed 3.

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00-2 1 0.40 Solids, neglig and pases: Picasily of a liquid (\$12.5) may 191. 7.30 Sacial psychology: Alanylly inter-oction (\$1 + 0.505) (prog. 11).

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Province-chancellor: Professor Anyan Mucfulyen. Deans: J. C. Lehone (school of sorial sciences); Dr. R. G. Ussher (school of humanhles). Promotions to senior tecturer: Dr. J. McMullan (physics); Dr. C. Thomas Igeography).

Promotion to senior lecturer: Dr R. G. Dyson (industrial and business studies). Lecturers: Miss L. E. M. Compilelt (instory of urt); Mrs G. A. Cousin (theatre stolles); Dr S. C. Dmil (anthematics); Dr P. K. Sinha (engineering); Miss C. Urwin (psychology).

West Midland Arts
Mr George Prait, seither lecturer in
music at the University of Keele, has
been elected chairman of tyest Midland Arts.

Mr Robert Guodden has been appointed chairman of the Crafts Advisory Conjunities for a period of three years from September, 1977. He will succeed Sir Dimean Oppenhelm, orthing chairman since the death of Sir Paul Sinker earlier this year,

Noticeboard is compiled

by Patricia Santinelli and Pauline Gamble

Crafts Advisory Committee

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7.00 • The early flamms empire and the rise

18.10 • Familiary (\*11kr ; prog the rise from the resistance from the rise from the



# Managing things as training in managing people

ever, it can be argued that it is in fact desirable to obtain a universtry degree in engineering expressly for the purpose of employment in management and administration.

There are several reusons for this. At the must cynical, we can aliserve that the world around us, which has so far been run ominly by "aris-men" and economists, has printed so manifestly unsuccessful that a so mannestry unsuccession that it change—almost any change—in the "management" tenor is bound to he for the better. The second reason is the intrinsic value of engineering education, especially of the type which we tractice in civil artifection. idudaistration and managerial work.

The third reason is more paraing edicurian spread throughout society at large would be good for the states of those who practise engineering. And status seems to be the main preaccupation of engineers at the present time—although peranally I do not share this concern.

Before elaborating any of these ideas, something should be sald about the present simution regardoutside engineering practice. A search for the names of people in



Secure that the BIIC had determined to colebrate Rubens's Year with

ather ilian cuthusiusm.

white.
This feature was un 80-minute

almost three hours of programmes in a single week (the week of Robens's 400th birthday) i was more supposed than untimised; one thing I have learnt from 25

rears of attending and alwing art Peter Paul Rubens' birth

Four talks given un Reillo 3 d'd cattling carriage and tranquil hird-

Above all, they were (inevitably) millustrated; and since colour slides came in about 15 years ago, even the worst lectures have acquired an interest, and even a piquancy, as a sequence of radiate masteraleces on the screen has received to interpret and direct our extention to them. (and the contemps of them to the contemps of them.)

peatedly triumplied over the most attention to them (and to compen-

Much is currently said about the shurtage of jobs for young engineering graduates, and misgivings Service, Parliament or local governexpressed about the need for them ment who have a degree in enginon seek inni-engineering employment. Contrary to this riew, lines ever, it can be argued that it is becausely, many such people have

This is not the place to compare the fortunes of those countries with our own, and of course the presence or alisence of engliteers is not the only distinguishing teature. But in those countries engineers are thought to have something to contribute to management and to administration, so that their services are welcome and indeed well paid.

Let us look at what is involved in management. The manager's task is to decide what has to be done, and then to get other people to do it. So the basic difference between So the basic difference between continuous and management is that one uses forces of nature, and the other furces in people. (And of course forces of nature cannot be utilized other than them to the other than the ot other than through

good manager. What knowledge is needed for

minagement? Presumably the hand, manager has to be knowledgeable. Eng almit neopie. The usual engineering course, admittedly, reaches little on the subject; but not does lay, economics, accounting, and certainly not English, or the Oxford Greats, are thought to be natural managers. plex planning. So the explicit knowledge about people acquired at the under-

graduate level is ant a prerequisite for inlaing the managerial or adultistrative class.

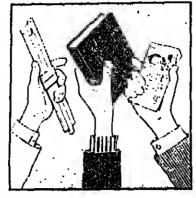
The requisites for management also broken business, fluncing and perhops law, but this has in be acquired after graduation by the ongineer and non-customer alike.

My second point is that as for as passessing a laws for learning the tracking the professional point is that as for learning the tracking the professional point is that as for learning the tracking the professional point is that as for learning the tracking the professional point is that as for learning the professional point is that are the decided upon the professional point is that the professional point is the professional professiona

as possessing a basis for learning the tackled, and then a salutha has numogenent, the englacering grainate is better off than the arts graduate. For the engineer has become acquainted with several assetul approaches and techniques, for the assetilon about the suit-

John Nash reviews Robert

Hughes was good (and muy have



Education and Industry

one of which is to make decishors

An insistence on reproducible situations would, of course, be There is a terrible quantation from William Durrent, on American in construction, and above all in philosopher and historian, that "under every system of decisions on the basis of incomplete "under every system of comming mist of a fearly in make comming, men who can manage men manage men who can make the basis of incomplete data. Here, he is much better prepared than a pure scientist, who manage things, though not every engineering graduote will make a generals and medics, must make decisions with iondequate data in management? Presumable the decisions with iondequate data in hand.

Engineers have the obvious variage over those trained in the orts of being nanocide; they also acquire the asset of step-by-step analysis, which is necessary in decision-making, particularly and yet graduates in these subjects allocation of resources and in com-

These are exercises in choice-making, and so is engineering. The

as learnt in engineering, objectives have to be declied upon, the prob-lem has to be unalysed, broken down loto components which con be tackled, and then a sulution has

ground for numagement; it was We admitted 157, of whom, considering all A levels, 68 had at least approach, furnilation of tornes of efficiency and optimization, who

A specific comment can be udded here about engineering currients which ris management. I mentioned above the scheme of study in the analysis of civil engineering at feeds, there are good someon, and end female, on civil engineering in the department of civil engineering at feeds, there are good someon, and end female, on civil engineering in contrast of civil engineering. along the scheme of study in the department of civil engineering at Leeds. One feature which is relevant to the present topic is the possibility of including in the cut-miny to full there is an oppossibility of including in the cut-miny to full there is an opposite the control of the cut-miny to full t interests.

feets: English or French literature, prospects of engineering employpsychology, law, sociology, philoso-phy, history of Roman Britain, archaeology, and so on—a total of 31 different subjects.

prospects of engineering employment should not control the number of engineering and versity course is engineering.

After all, job prospects do not control to the number of engineering and engineering.

These are not special courses for engineers, but our students are put right among arts students or other non-engineers. This contact, usually intally obsent, is useful for our nich and women in the future when they practise engiacering. It is even more useful for them if they do not, and it is af course very educational for those studying the

Finally there is the polut whont spreading the engineering image— nor faith—among other people. If engineering graduates make a success of work in commerce or gov-ernment, then the idea that engliscers are different—that they are illclucated proctitioners of a cruft—
will skewly disperse. They will be
thought of more highly as people,
and perhaps even as engineers. And
the Government will hapefully become more conversant with technology and its proper role.

It is apposite to enument here
on the quality of civil engineering
syndents at Leeds, as there is a
willesprend belief, strengthened by
pronouncements and completers
from engineering institutions, that
the intellectual collibre of engineerward to managetial current of the
thought of more able, octive and interest
students who would be looking betouched to protect the continuent
there are movement and beauty
pronouncion prospects within to
would be good for the engineering
and protone.

And last, but certainly no less
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would lie gued for the confinering
and protone pr cers are different-that they are ill-

the intellectual collibre of engineer- ward in a unmagerial career loss mark on students is low.

As far as our department is con-remed, this is not true, and has not been true for soveret years. Last year, for exomple, we had 1,481 The in applications out of the 5,570 who applied for admission in civil Leeds.

of efficiency and optimization, who created the science of management, and who shaped the largest American connections.

Another complaint is about the small number of women who had elyil engineering. In the department

In the first year, and sometimes argument that engineering educ-in the second and third, one sur-dents have selected as optimal sale-ing chartered engineers, is that the

iafluence the number of sudent rending for a degree in English literature and its o professoal sense, such a degree offer secured at all.

The summarize the above me

ment, more graduates in mineral the university of later on in life should move into general name ment, because they have the for background for otanagement his open-ended, and well-paid careet, It would be good for management and administration, which med good people. It would be good for those who remain in engineers because movement out of h would

Adam Neville

The muhor is professor of dell engineering at the University of



gid discourse.

\*tc for the conseners of the medium), were often effective. as lic sald earlier.

white.

This feature was un 80-minute
Life of Rubens, written and narroted by Rubens, written and shot
in London, Paris, Bolgium and Ruly,
The Ekm was determinedly lively.
Hughes addressed as from the Banquoting House in Wiltehall and the
Luxembourg Polace os well as
Rultens's holse in Answerp. He
trotted up and down stolts in the
Godzega Palace, Mantina, and sat in
u Venclion goudola.

Music, from Monteverdi
Mozort, struck up of every opposituatity, and Hughes's recrusting of
Rubens's bistery was knownedically
anguigned by appropriate squad
uffects; a clunging dunggon dum;

the declaritation in presse of unity. And ir spring from bit deepest feetings, England was the theatre of his one hig success as a diplomat; the poice whose groundwork Rubens had laid kelween Olivares and Chartes I. Elsewhere, his diplomacy had not expliced. These was no touce to nut carked. There was on judge in Europe, and The Netherlands were still spit in two: North alvided against South; Catholic against Pro-Placed well in the second half

rathing carriage and trumput any cathing carriage and trumput any song. But these derices were—in linguistic words and linguistic words—" twitche": I found myself, from faceo of habit, singuistics. I listened with interest like them very much. of the programme, this is not only the single reference that Hughes makes to the new Dutch Ropublic—it is its only indication that Rubens was a devout Carbolic who ottended muss daily, rather than the opportunity son of a "logger with Calded" tunist son of u lawyer with Calvinist leatings who had lackily remarked to Antwerp at the very moment when the Catholics wanted to repoir their churches . . . flis timing was perfect. He cought the and he rode it duwn fur 30 years,"

I therefore turned with more critically interested as the first of the first of the ductor, Ludo-first on the first of the ductor, Ludo-first on the first of the ductor, Ludo-first on the first one of the first

Inst as Hughes, avoided constituting the photory wars of the seventasance entry, so the rotused to discuss the rich symbolism with which Rubeits represented them.

"Allerory is o dead form" Hughes said, apoeking of the Medic cycle, and udded: "No matter. It is one of the his-dozen most dazzing marathone of pure extuberant-succer rescoilles him, or his rourk or his independent of the West".

But to ignore Rubens' symbolism is to be blind to his imaginative richness. The rescoil of the west ciclous its not cosily reached. He is not representative." But to ignore Rubens' symbolism is to be blind to his imaginative richness. The rescoil of the west redious its actions in the programme was: "Nobing lu unreal with the rescoil of the west."

But to ignore Rubens' symbolism is in the interest of the West".

But to ignore Rubens' symbolism to be blind to his imaginative richness. The rescoil of the west redious its actions in the programment of the properties. The rescoil of the west redious its actions in the programment is to be blind to his imaginative richness. The rescoil of the survey of sixthers which is the programment of the properties. The rescoil of the west redious its actions in the programment of the properties of the west in the survey of the west the survey of the west that it is not only reached. He is not the survey of the west the survey of the we

T. F. Daveney discusses the problems raised by confusion over the meaning of 'adult education'

# A misunderstanding that threatens the future of extra-mural teaching

A number of noiversity extra-oural departments and districts of the Workers Education Association have recently received from county authorities notice of reductions in the 1977-78 grant for their work in adult education, which, hitherta, local government has enthusiastically supported.

Understandably, in times of economic stress, no one can hope in escape unscathed from financial rescape unscathed from financial rescape the control of the county of subjects, including those which are clearly recreations or positions.

trenchment; but behind the curs pastimes, there lies increasingly a misunder.

This con-

celved grants-in-aid for programmes of liberal studies for adults.

Liberal studies tor adults.
Liberal studies were defined as those acknowledged disciplines in the orts and sciences which were learned for their own solutions. med for their own sake, and which were designed to impart a deeper insight into, and o wider understanding of, man's unture and

This Graceo Ronalssance defini-This Graces-Rolalissance actininition of liberal learning, which is
tied to the notions of self-developmen and knowledge as an end in
liself, was glassed for the purposes
of grant with certoin specific exdusions: eg vucational courses; pricical activity); certificate courses, unless they were willmut recapional intent; language instruction, unless the languages were deal. As one cyale put t: "Anything provided it is useless."

Although responsible hotties, and Attenuing responsible nomes, one streament departments in particular, occasionally found this tight characterization of while chucation somewhat leksome, it had the virtue A identifying cleur objectives and bolacog a sector of the educurional field tawartis which resourcesalinitesimal in comparison with the tainitesimal in comparison with the total educational procurement—could accurately be ilirected, leaving no opportunity for their missipplication or dissipution. The result was—and still is—a highly efficient cost-effective service doing exactly the job it was colled upon to perform.

### Burred definition

In recent years, however, for o which reasons — of which raddled thinking is the most significant—the concept of edult education has become blurred. The barring process has followed upon a quest-philosophical querying of the definition, as though the concept were some mysterious beast

categorized as sports, pasilines, recreations or hobbies, has hod unfortunate consequences.

For their scrious academic programmores of education for ndulus, which in the past have ottracted lacal authority grant without question, have now tended to become identified with leisure octivities. And icisure, us we all know, has to be paid far by those who enjoy it, and courseless adjusted accurdingly.

from the local outling type would suffer a reduction of 35 per cent, not only for reasons of comonty, but because the fees it charged weter too low in colarion to the outloofly's user classes, substantial proportions of twhich were of the leisure and recreation kind, and were of the leisure and recreation kind, and were of the testing of the field who would concede that extre murel courses should be compared in this way. The work of moral conviction, to the public at large, it therefore falls within the course of principle which has been eccepted since 1919.

The institutionelizing of this contral testing the field who would concept of traditional education, to be supplied at nil or low cost—a principle which has been eccepted since 1919.

The institutionelizing of this contral testing the field who would concept of traditional education, to be supplied at nil or low cost—a principle which has been eccepted since 1919.

The institutionelizing of this contral testing the field with the company to the principle which has been eccepted since 1919.

The institutionelizing of this contral testing the field with the contral testing the for completed to mivoside the molecular testing that sort of thing was been eccepted to visible the mile that the molecular testing that the course of the fledging Nellonal Union of formalists. It was official that the course celled a lipid man in journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be providing instruction or proctice in the technical side of journalism would not be a course. The lectured to fine the course of

since 1919.

The institutionelizing of this con-

# THE L.U.J.S. GAZETTE

PRODUCTOR OF JOURNALISM STEDIOUS OF UNIVERSITY RINGS AND BUDDING COLLEGE, AND DE ARE LOND LONOMES IN THE UNICHOUSE OF TOMOR.

DR. BARKER ON NEW SCHEME OUR SEAMENTERING THE FUTURE OF

Four Kinds of Schools.

In an interview with our representative of Schools.

In an interview with our representative of Schools.

In an interview with our representative of Schools.

It has not been supposed to the suppose of the s

TORIALS, ELECTRICAL POWER

# which are clearly recreations or treatment; but behind the cuts there lies increasingly a misunders anding a extra-marcal work which if allowed to persist, may cause even greater danage in the future. The misunderstanding is of o pillus applical nature, and concerns the concept of adult education referred olimost rarbosively to the octivities of university departments of extra-murul studies, the WEA, certain specifical adult education centres, and adults. These institutions were designated with the solvering like of "responsible hody" by successive education ministries, and received grants-in-aid for programmes of liberal studies for adults. The first issue of The LUIS Cazette, a newspaper produced by atudents on London University's pre-war diploma for journalism, and one of the practical exomination papers. This confusion has been compound. The continuity of the community advention of the community of the programmes of liberal studies, the built of the continuity of the community of the programmes of liberal studies for adults. The first issue of The LUIS Cazette, a newspaper produced by atudents on London University's pre-war diploma for journalism, and one of the practical exomination papers. This confusion has been compounded by the devent of the community of the programmes of liberal studies for adults. The first issue of The LUIS Cazette, a newspaper produced by atudents on London University's pre-war diploma for journalism, and one of the practical exomination on the programmes of liberal studies of the centre of the community of the programmes of liberal studies of the centre of the centre of the cen

Side-effects

As far as extro-mural departments are concerned, the widening of the traditional notion of adult education to include activities which are categorized as sports, pasilines, recreations or hobbies, has hod unfortunities on the formulasion has not devoted not sport to include activities which are categorized as sports, pasilines, recreations or hobbies, has hod unfortunities consequences.

The third Royal Commission on the Press has spoken: 46 per cent of editors sampled thought that some form of higher educations was pertinent for certain kinds of journalism. Of the various categories of training sampled, only those on a postgraduate diploma course seconed the impriest with their course.

Like its two predecessors, this Commission has not devoted not set the consequences.

And icisure, us we fill know, has to the paid for hy times who enjoy it, and course fees adjusted uccurdingly.

To intoto a specific example, one department of extra-mural studies was lufurned recently that its gront from the local outhority would suffer a reduction of 35 per cent, not only for reasons of economy, but in be learned oriside the university;

NUJ was allowed two representives

Fred Hunter describes an early experiment in the university-based course training of journalists

students at the London School of Printing.

However, students were not being offered a university-run course, but college-based lectures at the constituent colleges: King's, the London School of Economica, University, Bost London, and Bedford. The only time the students traine together was for the infrequent "technical instruction" sessions. Graduolly colleges deopped out of the course until only King's end University were left, and from 1929 King's menocuved for completa control which it gained in 1937.

facte about accurecy, brevity, end clority. Reporting assignments were listed each week, with the time the copy had to be handed in, and

spondence, applications for summer joba in newspapers, and even acted as on unpaid appointments officer

No wonder, then, that Tom Clarke' could tell the Institute of Journal-lists in 1936; "I have found there has been nothing I could teach them in the newspaper office that I could not teach them better in the class-

In the eyes of the National Conneil for the Training of journalists, the diploma course was too theoretical. But mora then 50 percent of journalists being trained on the job today believe they receive too little supervision, while 56 percent of their cultors, according to figures from the Royal Computers on the Press had no ndssion on the Press, had no planned instruction for them.

In on aftenti to restart the dip-lonto after the 1939-45 War, Ton Clarke wrote; "The field of reportlug is widening in the home ond international sphere. A more discrimitating and botter-educated public will be looking for botter

or the journalism of those responsible to keep abroost of this new ond -news will trevel faster and get sooner out of hand. It will need to be presented quickly with knowledge, with truth, with a sense of proportion and with decency. And it will not do it if it has not the property of knowledge, behind it." power of knowledge behind it.

The immediate pre-war chalrmen of the journalism committee, Major-Generol Lord Burnlam, was Interviewed by the Ross Commission on the Press in 1947, when he was vice-chelrmen of the Newspaper Proprietors' Association. Asked about his views on training journalists he epoke warmly of the diploma in journalism end said: "It was not readily to restart tills London. The institutionelizing of this converted thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation" is now proceeding collecting process has followed upon a quest-philosophical querying of the definition of adult thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation" is now proceeding thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation" is now proceeding thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation over the definition of "adult Glicant—the concept of edulation" is now proceeding thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation over the definition of "adult Glicant—the concept of edulation" is now proceeding thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation" is now proceeding thinking is the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation of "adult Glicant—the concept of edulation" is now proceeding the council of the proposed to close text that on a proposed the council of the most significant—the concept of edulation. The institution of "adult Glicant—the concept of edulation of the Messpaper that the concept of the Messpaper that

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Importance of scientific

'independence' stressed

PARIS

France must aim for greater sell-reliance in key areas of scientific

research, the Secretary of State for Scientific Affairs, M Jacques Sour-dille, has said.

bresenting the mojor priorities in the research budget for 1977-78, M Sourdille said that special importance would be ottached to areas such as outlear energy, discounting energy sources.

areas such as noticear energy, diter-native energy sources, space re-search and the further development of computer hard and software. Among the other priorities of the £1,393m catmates will be the health services and fundamental work into

The budget, to be pleced this outumn before parliament, is a clear increase over last year's expenditure. New research programmes amounting to £85500 or or the control of the control of

sonic 73 per cent up on last year.
Recurrent fluence of projects is to
be booted by around 12 per cent

Mowerer, certain research insti-tutes, including the world-famous Centre National de Rocherche Scientifique (CNRS), will continue to feel the effects of the oqueeze. So, too, will agricultural research

ond programmes luvestigating the development of ocean resources.

The most spectaculor victim of the government's new R and D policy is the proposed 3.8 megawatt solar electricity generating station. Its supporters, including the official working group on alternative energy sources, were told by the Secretary of State that the project would be deloyed for at least another week.

The most spectaculor victim of

raw msterials.

starch across different ministries. This rationalization stems in part from the current financial situation in France, where inflation is consistent and the start of the star

### North American news...

# Religion looks set for campus revival

frmu Thomas Cabill

mened, the Louos Association has moved 63 retail shops, most in the wicinity of college campuses, almost all doing a very lerisk husiness in everything from books by C. S. Lends and Charles Williams to in-splantonal posters for the walls of

vicinity of college campisses, idensis all doing a very lerisk husiness in everything from books by C. S. Leaks and Charles Williams to insplict sphrithmal pasters for the walls of students' rooms.

New periodicals, such as HIS, geared to cullege andiences, have also experienced omistal success. Large red buttons, hearing the legend "Get Smart—Get Suved," are sported by many collegians.

In professional circles there is also—for the first time in pears—in stir of excitement about religion. Recently, an internotional assombly of Catholic scholars met at Notre Domo University in Indiana and decided to call for the convening of a "India Variean Connect to finish the first variety of Catholic scholars met at Notre Domo University in Indiana and decided to call for the convening of a "India Variean Connect to finish the first variety of Catholic scholars met at Notre Domo University in Indiana and decided to call for the convening of a "India Variety Canada Catholic Scholars met at Notre Domo University in Indiana and decided to call for the convening of a "India Variety of Catholic Scholars met at Notre Domo University in Indiana and decided to call for the convening of a "India Variety of Catholic India Variety of Catholic Society of announced the completion of a for the condition in the convenient of the convenient in the catholic and the completion of the function for the convenient of the conv cided to call for the convening of a Third Vanican Conneil to finish the work of reform, Among the specific reforms they seek are a curtailing of piqual authority, full acceptance of divorce and remarded Catholics, an end to mandatury relibacy for clergy, recognition of the calinity of Protestant ministries. sharing of the euchorist with inher Christians and ordinatino of scamen.

Two developments were notable at Naire Danie. One, suggested by the confident tone of the pronouncements, is that the scholors consider

more interesting than anything most NEW YORK bishaps could come up with.
The second development is that

Religion is much more in evidence no college compuses than it was five or 10 years ngo—when it had almost seemed to disappear almost seemed to have spent itself. A new chain of religious bookshops, called Logos, has had a remarkable development.

Since 1968, when the first logos opened, the Logos Association has

In another challenge to the helenguered hierarchy, the Catholic Theological Society of America has

hy autouncing the fermation of the Princeton Religion Research Center. Mr Gollup, who is President of the American Institute of Public Opinion and an active Episcapalian, will be ra-chairman of the new tentre with Miriam Murphy, a Roman Catholic sister who teaches sociology at Princeton Therdagical Seminary.

According to Mr Gallup, whose predictions are midely respected, the United States "may be in an early stage of a profound religious revival". He actributed what he the confident tone of the problemics revival". He attributed what he ments, is that the scholors causider called "this groundswell of interest themselves as much the outhentic in religion" largely to evangelical movements in the various compant of the flore for that the present occupant of the White House is a publically hergely on thoir nowsworthiness, their colls for various lunovations their past tew years have been butlon to the new mand.

# 'Learn-to-write' scheme spreads to five states

The Buy Area Willing Praject, an experiment storted four years ago with mudest resources and mudest olms of the University of Cali-formin in Herkeloy, has expanded this summer to 12 outversities and ailoges lu livo states with mare

growth plonned.

The project began as on effort to improve the twitting standards and takills of students in high schools in the San Frencisco Buy urea; it

Financial support for the expanslon has come from a \$588,000 grant by the National Eudowment for the Humanides in Washington.

The project at Berkeley will pro-vide a model for the new centres, beir programores to suit local con-

F

STANFORD themselves: under the guidance of former porteignants in the project, or years ago and majest they discuss common problems in the teaching of writing skills to high school students and they exchange lideas on methods that have praced successful. The tenehers also spend a good deal of tions doing what their students must do—writing.

This summer eight now centres have been established in California, unlikeloogl funding is coming from the California State Department of

Four other centres have opened this summer at Pace University in Now York, Rotgers University in New Jersey, the University of Colorodo in Houlder, nod in Oregon uniter spoosorship of three school districts.

On a notional scele, obout \$11 billion has been made in student loans since 1965 in programmes that are either run directly by the Government or through state agencies. Students poy 7 per cent interest a year old the hanks

New Jersey, the University of Colorodo in Houlder, and in Oregon muller sponsorship of three school districts.

Proposals for other contres are now being considered, and it is plumed to increase the number to 20 next year.

their programotes to stut tocal conlidious and interests.

At Berkeley, outstanding teachers of composition from Buy area high schools end colloges are selected to a study being mulo imo the language of the progroume on student writing the university. The teachers receive ing. The study, which is boing 

# Science research 'in decline'

A new study of the state of uca-dentic science in the United States points to " clear signs of decay" in scientific research. It warms that if action is not baken—"The nathur will be weaker for its lack of The study, The State of Academic

Science, was funded by the National Science Foundation and the Alfred Slonn Faundation, and the Afred Stolli Prantaction, and published by Change Magawine Press. Its authors, firuce Smith and Inseph Kndesky, visited 36 universities and consulted 383 university acknetists and engineera.

Recognizing that the Inck of uniramatic crisis inhibits a strong authors. gaveriment response, the authors stress that if remodial action is not taken, there will be a shorp decline in the ability of American universities to sustain basic research.

The of the main reasons for the problem of American is the

problems of American science is the decime of public and private sup-port for rescorch, says the huok. Tradulonally, there have been four main sources of support; govern-

student loans

Banks halt

Stent ment, industry, private foundations fooding of university and the universities. His fooding uperative or cost-shart levelled off in the late 1960s and programmes, university there has been a shift towards greater support for life sciences, especially those linked up to medi-

cation and Welfare may provides over half the federal support for scientific research, but it tends to facour applied and "safe" research, at the expense of more immediate funding for physics fell 40 per rem, while federal dislars for life sciences rose to 54 per cent of the sections are sent to the sections. total government floiding for

sclonce. One solution would be to increase the support of industry for hasic research, soys the study. But it admits that academic and indusvrial communities have consistently mubivalent attitude towards each other "...

the the authors claim that universities would like to increase their ties with industry and they suggest tarious mechanisms for encourage-

programmoes, university/bidasa search consortia and labar shared between universitis The soudy also paint to the cline in graduate stadents the scientific fields and attribute to the difficulties that young thave in finding suitable to the difficulties that young thave in finding suitable to their the investiges must be a thirty emiscessites must be a to increase the size of their

to discrense the size of their a enralments do not warrant at leteriorating relation be-universities and government en-bate these problems. The sai-sity's dependence of some has increased because of the dente fluancial crisis and that fuelled uncersions and that fuelled intertuinty about the legisle of scientific research.

If aendemic science is to take

any the undiors, the mount industry and the universite a re-examine their priorities of m to nerge ou a common set de pluce in the forelron of some

Edward Sheffield reports on the annual conferenced the Association of Universities and Colleges of Canada

# **Key planning role of** Despite Federal Government efforts to reinstate the flow of money to stodents, Washington residents who aftends college cannot obtain lowerest loans locause of previous defaults. Bank officials in Washington have jud denied the mayor's request to relustate loans. Last symmer, the District of Columbia became the first major city in the rountry william o stodent loan programme other washington banks stapped making the loans of the University of Winnings, and to the loans of the loans of the University of Winnings, in the president of the president is pulcy for university resolution. In his presidents of Winnings, to report may plaus for degree annual conference of the Association dispatch.

The halmned between the federal unit provincial roles in Conadlan higher education has shifted markedly towards the provinces during the past year and a half, said Dr thury Duckworth, President of the University of Winnings, in his presidential report to the annual conference of the Association of Universities and Colleges of Counds (AUCC) in Halilux.

His review of relations between wineful cummittee on finally were versities users provinced and the balt federal government had past its pulley for university results in pulley for university results for report any plants for the results. louis. The reason for the forminu-tion was that definits had rises to \$2 million and the chy government

had fulled to honour its guarantee agreement to cover them.

The deland tate of DC students is currently whoot 33 per cent, by for the highest ruto in the cannery, according to the Federal Office of Guaranteed Student Lucius.

About 14,000 students have harranced \$14.2 orillan under the presented to the 10 provinces in january 1976, urging Instances.

About 14,000 students have harranced \$14.2 orillan under the presented to the first the field of higher educations at the first true reaches with the Canadian Association of biographics are reviewed. Teachers with the Canadian Association of biographics are reviewed to the Prime Muster of Canadian Association of biographics are reviewed to the Prime Muster of Canadian Association of biographics are reviewed to the Prime Muster of Canadian Association of biographics are receptive to proposed section of biographics are proposed section of biographics are receptive to the Prime of Council section of the Prime of Council section of

About 14,000 students have hormored \$14.2 orillon under the purpersonuc since it started in 1967. Last year, 1,500 students applied for homs, but mone were granted. Since January, the Dulted States Office of Education has been trying in get the hunks in make they home under a programme of direct following moder a programme of direct following marantues. The hanks have refused to the so until they are paid lack off the number that is owed them.

The City of Washington is eligible for rehaborsement of 80 per cent.

The City of Washington is eligible which, according to Dr Duckworth, accustomi meetings of the for reducive it awas the lands from the Federal Government, but in January the Federal Student Lour Office refused to reimburse the city becouse its records were not in order.

\*\*Morel 1027 Phonocing Act the first ministurs' caderal for the for Duckworth, accustomi meetings of the first ministurs' caderal accustomi meetings of the first ministurs' caderal accustomi meetings of the first ministurs' caderal accustomic meetings of the first m provinces;

lie said that oost people government recognized the sales in March 1977 by which the federal government withdrow from the equal sharing of post-socondary education costs with the provinces in favour of effectively unrestricted transfers of taxing power and funds from the central to the provincial governments;

oresiden of a jobit federal-provinces of which they are communities of which they are

neide. Air Gerahl Regan, Frenkt Navu Scotla, amencal the contact Scotlar, amencal the contact that because the provinces lide situational jurisdiction over the tion the milversities should know the though an already with them, and threatly with the following the f Her statement puts an ond to an increasingly biller hattle botween the Government, the university authorities and the left over the lature of the University of Paris VII.

federal gavernment.
Althungh hu ldemiffed the cil al Ministers of Educate

Founded in the interment of May, 1968, Vincenues was housed in temperary buildings and on land due to return to the numicipality in 1978. Odginally, like plan was to rescate the 30,000-strong university at Marae to Volice, an operation which some outhorlies estimated would cost f58mt.

It also lorroduced the aystom of tries.

PARIS
Plans to remove the controversion the east of Purio will not now he carried out, according to Mnic Alico Samier-Scité, Secretary of State for Higher Education.

Her materials, small group feeching, tunarials, student-illrected study and independent learning, and put an ond to the practice of professoriol lecturers (come magistraux) that took place tunder atrocloudy over-crowded conditions.

Even today, when higher educa-tion in Fraceo is still dondnated by the Buccalaireat, Vincennes reading a certain nevelty. One French student in three or Vincennes does not hold the Bac, Among foreigners there, this rises to more than holf. If the 15,000 new entents last October, 9,000 beld no formal entry quelifications et all.

Viccooneo to not uolqua in this respect. According to figures issued by the Secretory of State, eround 110,000 students out of a rotel of 110,000 students out of a total of \$25,000 in Freach universities last neudentle year wore unqualified. However, Vincennes io opocial in the proportion of its unqualified entroote and in being among the first lostitutions to actively welcome the unqualified.

The system of crodit-bosed marking, the system of success in creating a closed three times during the spring as a result of the divine during the spring as a result of the original content of the system of the number of foll-time working the number of foll-time working the number of foll-time working as a result of the divine during the spring as a result of the content of the number of foll-time working the number of foll-time working the number of foll-time working the street three times during the spring as a result of the divine during the spring as a result of the divine during the spring as a result of the original as a result of the violence. The most recent chosing came in Mey after one policeman was killed and several others were wounded as they were attempting to clear the campus of leftist demonstrators.

Halv

# Government prepares to ban students from abroad

from Patricia Clough

in France, where inflation is running at around 12 per cent. It olso
reflects the interests of Prime
Minister Raymond Barre.
Expenditure directly controlled
by the Secretary of State falls
multiply into two headings: assistance for project development dealing predominostly with research
previously under the Ministry of
Industry, Commerce and Small
Firms and, second, financing fundumental research. A decision by the Italian Government to ban any new foreign sto-dents from Indian universities for the next two academic years has aroused strong procests here and

The decision was prompted by the clientle avorceowding of Italian universities, where entrance is open to all who have completed their sec-Other areas, for instance France's contribution to CERN, the European Centre for Nucleor Research at Geneva, are finonced through the

ondary education, including foreigners. The only further requirement for foreigners is that they pass a simple language test.

The number of foreign studeois is not exactly known—estimates yory from 20,000 to 50,000—but in ony case is is only a they traction of the nearly one addition student population. oppropriate ministry—in this case the Ministry of Foreign Affuiro.

The kudget for project development has been increased by 10 per cent and that of fundomental research by 14 per cent compated with 1976-77.

The occouncement that France

The occurrent that Frence should go all-out to releferce lts scientific lodependence comes sa sparticularly delicate time. Though the French porlioment has occupied direct elections to a European Parliament it still has considerable misgivings.

This dues not meen, however, that scientific cooperation with fareign countries will suffer. Far from it. The exchange programme between French and foreign scientific tooperation with the tween French and foreign scientific tooperation with fareign countries will suffer. Far from it. The exchange programme between French and foreign scientific tooperation with fareign countries will suffer. Far from it. The exchange programme between French and foreign scientific tooperation would be seen to discriminate against lower-sorie economic groups who, under the present education oystem, got inlocate schooling.

The Foreign Ministry spokesman and they were "the fact that they are the ooly oces who can be borred from universities here without rouging a pollucul fuctor.

A Foreign Ministry spokesman and they were "the factured from universities here without rouging standents' instorture is really the fact that they are the ooly oces who can be borred from universities here without rouging a pollucul fuctor.

A Foreign Ministry spokesman and they were "the factured from universities here it is foroign students' instorture is really the fact that they are the ooly oces who can be borred from universities here without rouging a pollucul fuctor.

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A Foreign Ministry spokesman and thoy were "the factured in the foroign students' instorture is really the fact that they are the ooly oces who can be borred from universities here without rouging a pollucul fuctor.

A Foreign Ministry spokesman and they were "the factured in the foroign students' instorture is really the fact t

other year.

These developments point to an increasingly important role of the Secretary of State for Scientific Affairs, hitherto a reintively minor agency, but now coordinating re
Pressure eases on Vincenness

Pressure eases on Vincenness

Imbat universities over the two years, Two years, The but does not apply to those already studying here, in those who have received Italian Government sololarships or, it is understood, to foreigners taking Italian Government sololarships or, it is understood, to foreigners taking Italian Barguage and culture courses run by Perugia University.

The loop of the two years, The but does not apply to those have received Italian Government sololarships or, it is understood, to foreigners taking Italian Barguage and culture courses run by Perugia University.

The loop of the two years, the but does not apply to those have received Italian Government sololarships or, it is understood, to foreigners taking Italian Government by the secondment tended to be on a long.

The but universities over the two years, The but does not apply to those have received Italian Government sololarships or, it is understood, to foreigners taking Italian Government by the secondment tended to be understood, to foreigners taking Italian Government sololarships or, it is understood, to foreigners taking Italian Government by the secondment tended to be on a long.

The best universities over the two years, all the four two years, and the four tended to be on a long. The best does not increase the forest of the foreigners taking Italian Government by the foreigners taking

pendlog a furmal decree due to be issued by the Education Ministry.

The decree is still being worked out and there is speculation that the ban may possibly be watered down.

In particular, some foreign governments are understood to have objected thei blisteral cultural

to study hare.

Meanwhile, protests were also being raised to Italien political and academic circles. The Dean of Rome University's science faculty and Italian universities were heading "for an even greater provincialism".

A spokesman for the Socialist Party osked: "What would heppeo if other countries returned the com-plinant? To what level would our culture be reduced if our students

Nine months after Thailand's military coup, the country's universities and students are still under strict surveillance. John Kirkaldy reports.

# Student activism a thing of the past

protest from the country's univer-

on intend to therme may form of protest from the country's universities. Events have turned full clicks. Events have turned full clicks in 1958, and the alterails of the 1968 constitution. In particular, the samicals were constantly in conflict with the orifitary, who have ruled the country on and off nader various leaders since Thabland tensed to be an alisalted atomachy in 1932. From the late 1960s, student demonstrations became even more regular. This was mittly following the exomple of other countries but also reflected clinutges within Thol society. Most important of these were the confluid movement of Thalland's population into Bangkok, the site of six of the country's mine oniversities and three of the five colleges of education, and the growling mumber of students which reached E6,031 in 1973.

It was not the turnest at the interior of Thalland (NSCT) was formed, which was involved in maintains. Many students were the confluid (NSCT) was formed, which was involved in maintains. Many students were the originate with the contribution, and the growling the time interior of the country with the originate with

The new regime has clomped down on all form of dissent. The Primo Minister, Thanin Kraivichien, bas introduced struct censorslilp of the press (most foreign accessopers are excluded) and the borning of assemblies of more than five people and all political parties, Thanin's 24-man cabinet has essuated wide powers of arrest and determine which allow "conneunist suspecess" to be held for up to 150 days for investigation. So far several thousand people, many of them students, have been arrested. Books, pamplifets and newspapers considered subversive have also been extended to some Asian comp-

Since the first anti-Freach vectional colleges, who were demonstrations of 1940, however, opposed to the accivities of Thomstudents here played an increasingly mesat.

The numerous troops who march past the gates of Thanmasat University in Bangkok symbolise the dramatic change in student activism in Thailand.

The new inilitary regime, which solved power in October 1976, has made it very clear that they do not brend to obtente my form of protest from the country's university of the 1957 election, the World Court's decision over the corruption of the 1957 election, the World Court's decision over a horder distance with

university corruption, appointmen

Events came to n cliness when the Rector of Ramkandiacua University illisorissed nine students for criticizing the government, and this

The hours of the 1973 novement have proved lorgely illusory; the genarol concensus needed for a liberal ilemocracy has so far not been apparent in That society. The regima of formor Prime Minister Seul Pramol was mobile to cradicate the wide-scale corruption or roduce the problems of the economy only only has new governments in noarby Cambodlo and Vletcam how fod Thailand's traditionally entiled; wing stance.

The Government has already Claimed that some sindente have

Compared to some Asian countries, student protest in Theiland to fairly new phenomenon. That land, although frequently menoced by outside powers, had no direct colonial experience and so kecked the anti-mperialism imports of the student movements of other nations, such as Iudia. The first university to Theiland, Chulclongkorn, was not founded till 1916 and the second, Thammasut, only in 1933.

Sinco the first anti-Freach to Theiland's traditionally enti-led; wing stance.

The Government has circady their wing stance.

The Government has ofready their wing stance.

# constitution in pending in higher education, the proposal was seen by meny teaching stoff of editions to edisgolsed attempt suching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the foreign stope that the proposal was seen by meny teaching stoff of the proposal of the proposal of the proposal of the proposal was seen by meny teaching stoff of the proposal of

Vogol, Justice Minister, has warned.

He estimates that from 1981 e considerable proportion of the law graduotes—es much os a third has been suggested—will not be able to find amployment in caroers traditionally choson by thom.

All Gorioen lewyers ero trained in univorsity law schools. After studying from three to four years before their first degree axamination they are given three years further practice.

bor of qualified school leavers rose by only 40 per cent. A further iocresse in the number of those wenting to rend law is expected.

The number of lawyers completing the two stages of their legal education is estimated to very between 4,500 and 5,300 each year, rising to between 6,000 and 7,000 between 1981 and 1984. On the other liand the "replacament rata" is in the order of only 2,000 and 1984.

go up 4 pc

On a notional scale, obout \$11 billion has been made in student loans since 1965 in pro

Pessimism and molaiso in society l'uentries of education were of the mounted largely from the fact that kind, he sold, and had as plat to the mublic, political authorities and a university.

Professor Dolshaw argued the universities had demonstrated the solves inequable of responding major cholleoges; "University government has become university to the majoronate."

Tenure for black militant

In an unprecedence ection though the controlled the recommendation of the University of College Entronce Examination Board has problemed to survey should be preceded the recommendation of the sociology department and ground to one of the university of controversity of the last sociology from the last special forms of the university of the last sociology forms an associate professor. An ad loc committee of the acodemic sands in professor will into the oboth to sociology forms and are proport in mid-June to one of the university as colleges there exists by black evilutes at the 1908 Olympic Gontos in Mexico City.

Ills ocademic interest is the veilology of sport. At Berkeley for the last six years list university as the popular interest is the veilology of sport. At Berkeley for the last six years list university as the popular interest is the veilology of sport. At Berkeley for the last six years list university as the popular in the university of the last six years list university as the popular interest. The controlled professor is the popular interest is the veilology of sport. At Berkeley for the last six years list university of sport and Reight, of the students have been enough the most courses have been enough the most course of the last six years list university, often with suddents have rised their prices the most.

It is not an interest to the veilor of the last six years list university of the last six

# 'Vested interests' under fire

scholara all wore asking limited rather than fundamental questions about the issues facing the world, Professor Cyril Belshaw told the confessor Cyril Belshaw told the

# Go-ahead for non-white colleges to open doors from Louis Hotz Recent legislation passed by Parillament will enable the Coloured by the lagislation will on the content of the institutions. In other words, the universities are opening statistics, as well as Africans, with the Government's studients, as well as Africans, under studients, as well as Africans, or processing to poster of the content of the studients of all races, a corresponding to poster of the individual of the difference of the content of the state of



HIGHER I DUCATION SUPPLEMENT New Priming House Square, London WCTA 8EZ, lelephone 01-837 (234)

# Training for uncertainty

In Jamery of this year Mr Donath Cook, the banker and chairman of the Standing Conference of Employers of Graduates, brighly graduates. Those for graduates will have to move out of the traditional plant phopers who have not traditional public administration for comployers who have not traditional plant phopers who have not traditional plant phopers who have not traditional plant property when the graduates industries—physiology denously denously denously on the graduates. employers who have not traditionally asked for graduates. Figures now arriving from the graduate careers services' central unit sugrest that 1976 greduates anticipated his advice and began the movilble more our of public sector jobs. the "reserved graduate arrapa-tions", into new passures such as insurance, selling, and working for smaller companies. Given signs of an upturn in the economic cycle and given that the rate of memployment among new graduates last year reached harely more than the varional memphyment rate, there are grounds for hoping the specife of significant graduate un-employment raised in recent years

If that assessment bolds true, it will prove to be a tribute to the flexibility of Brhish graduates and employers. Studies presently being conducted by the Organiza-tion for Economic Cooperation and Development in Western Europe suggest that onircisity graduates in some countries have such a rigid

some countries have such a rigid recent method in the procession of graduate-level courts they would rather drop out of the lower merket than take untraditional work.

Optimisto about the British jub market for highly qualified people ought to be tempered with counting, however. If British graduates are —as the lobour market analysts say —"trading down" to Jubs which carry less prestige this could affect.

# Credit transfer consequences

industries—obviously depends on the Government's plans for public

spending and their manpuser con-sequences. Projecting this year's expenditure White Paper forward suggests that further absolute cuts

impidly or as easily as, far example, the gradients of theford Dairerstry.

who by the end of 1976 were 98 per cent successful in finding

places.
What this year's graduates will

face is not so much the prospect of jablessness but an uncertainty about

their desilimitan that is new. The recent reports of university careers

Plans outlined this week for a new opency to monitor and advise an actional development in the field of credit transfer should be welromed. So should the agreement between the Open University and the Coun-cil for National Academic Awards that will illow students to transfer credits from one to another. Buth have far-reaching implications for higher education, and one hopes they will pove the way for me end to some of the rigidity and ocademic exclusiveness which have made it difficult for students to transfer from one course to another in the

Students have traditionally liega expected to pursuo common posts of study at a common speed. Educationists have claimed a imiqueness for their particular course and have been suspicions of the unbility of stoff in other institutions to complete the work they have been. If the DipHE is to become one of the maiostays of higher calucation as the James Committee proposed, all the present uncertainty is to be ended. At the this will have to chango. There will need to he greater fout and closer telationships between institutions if a coherent system of higher educa-

Photocopies and copyright

the allplanta syllabus to meet the requirements at nomber lustitution's

lugree. Students who have com-pleted a Diphili at one college may be accepted only little the second, not the third year of another, thus lengthening their course and creat-

Apart front its more obvious hence fits the advent of the photocopying machine has prompted a long over the produced, however, showing a correlated in produced a long over the produced however, showing a correlation in libraries between low subtractions on copying the little precision, immodiscy and cheapness has become widespered and restrictions on copying flaunted.

It is mublishers rether, than authors who have clonoured loudest for a review. The photocopying, shey cleim, is undermining publishing in particular of learned journals being bought.

The point is a moor one, Fiblishing of learned luurouls may be suffering from iright production costs rother than subscription losses and form those in turn because of high cover prices rether than the use of photocopiers.

It is olso argued, notong others by the British Library Lending Division, one of the difficult to production. In the more frequent and the photocopier take on proceed by the Whistord complication of the Edinburgh Review by Coples stone to which it refers.

The point is a moor one, Fiblishing of learned luurouls may be suffered from iright production.

It is olso argued, notong others by the British Library Lending Division, one of the biggest issers of photocopiers, that copies are requested primarily of articles in historic may be accepted and the photocopier and the photocopier is made the photocopier and the photocopier take on the production of high cover prices retirer than the use of photocopiers.

It is olso argued, notong others by the British Library Lending Division, one of the biggest insers of photocopiers, that copies are requested percentage for profiles and provided the control of article control of the cliffic proposal of the cliffic production in the photocopiers are implemented. In the photocopier is the case of photocopiers are implemented in the photocopier is the more frequent and the photocopier take on the production of the production of the photocopier is the more frequent and the photocopier take on the production of the

# LETTERS TO THE EDITOR

Yours sincerely, ANDREW PEARMAIN,

Inion education officer.

under the Berndswerbot which affect members of these universities and the Rive what support we can to

We encourage colleagues in other institutions of higher education to furn similar links with German In-

siltulians. We owe it buth to anc

German collenguos and an ourselves not in let the current developments in the Federal Republic poss an-

anticed and unopposed.

KARIN McPHERSON VIVIAN SALMON

Yours faithfully, PAUL SALMON

### German universities

views of flritish out-Marxists.

Tho authors' prejudices become clearer as the repurs proceeds. We find that their initial, and manyparted complaints about the incom-partiality at aradentic research and policies arm into a distance for the level of demarracy in the adminsuggests that further absolute cause in the manpower lerels of the public services are to be expected into the 1980s. Taken together with a vontinuing rise in the total production of graduates, it does suggest a hefry rise in the number of these near graduates are seeking jubs compared with last year. Not all of them will find permanent places us middly or as easily as, for example.

ferel of denorracy in the admini-stration of German moversities.

Must of dier conclusions are hased on a more thoroughly dis-credited appasizion between estab-lished "abjective" knowledge and sulversive "idealogical" Marxism; "the subjects which are the prin-dral concess of students addication. ripal centres of student radiculism—sociology, publices, Germanistics—nre tanglet in a highly idealogical way". Did it not occur to the repair's authors that Marxism as ocitical method of study, might have proved itself superior to other methods in such subjects? Then we find the heary add

Then we find the heary old myth that the disruptive leftist elements are really parastric, fille and middleclass, while conking-class students, "seriously transled by boycouts" are conscientious and inhedient, concerned sidely with getting at. Even if such in Impression were valid, might it not have been more accurate to conclude that miditual access in miversities for the working class. universities for the working class ensured that those who did reach such a level were more competitive and compliant, and hence less critical than their middle-riuss rumnterpuris?

runnterparts?

We more in to the engineration that "those universities most soverely, affected by haven interoof politicization are precisely those where structural returns have been most thustically applied, and in particular, where the Grappen-princip has been most fastidiously institutionalized". In other words, equal representation of different interests within the justifutions necessarily leads in destructive diction and conflict.

The authors' conception of In a report on the transfer of DipHE students at Bulmerske College, Reading, Burlarn Onslov said that since in clear pracedure for transfer existed each case had to be treated separately. She also painted out that course computibility was very difficult to define, leading to loss of time to the transfer land student or utilishment of the ultitions sylubus to meet that

The authors conception of The authors' conception of smhent representation contest clear to the next purigraph, where we find recognition of students' special interests, but which warrant only "Il perfect right to camplain if they are hally taught, landly housed, poorly subsidized". Students' are dus reduced to possive consumers of education, capable only of compilating.

Would the authors not conceile that students participate actively

Would the authors not concelle that students participate actively to their education, and might thus be capable of constructively helping to determine its conduct? Apparently not — "by the very obtained of their oge and their postition as students, they have certain defects os participants in the institutional life of the university".

Then we proceed to the thorny Edioburgh University.

### Ideal of clerisy

Sir.—One of the difficulties of having an article reduced by half is

nbout rbe eims, contents, and scole of higher education, and of the rule of government in determining policy, it is impurison that we do nut come to the delate nolvely or county-hended. We du lems, we illscover ourselves in our dealings with thom. We are children of history. As occilentes we exist to be context of past experiences and organism coough to prevent our eleconoring to plan with either wide-exed innocence, ur constipating sceptic-

I suspect that Mr Niouno and I suspect that Mr Niouno and I ure in agreement here. The important thing, however, is in breek out from the sterile oimplicities of those both laside and outs'de the Department of Education and Science who think of the present debate lergely in administrative terms. We heve heen thore hefare, it is time now we started to think about the real moral and social complexities of a mass higher education system. education system. ...

Yours faithfully, STEPHEN PRICKETT, School of English und American

# Part-time law degrees

Sir.—The extracts from the report of the Universities 17/168, June 241 deserce rhose miration, captured in the report is set in the context of the developing debate in your own columns and in broader of the chries about alleged "Marxist hias" in Brkish education of the imposition for the provision for the form of the imposition many bidding membership in anti-consisting the report contains in an explicit form judgments which until now have remained implicit in the views of lifting membership in anti-consistent in the report proceeds. We clearer as the report proceeds. We from heling "by no means severely that me construction in the implied suggestion that the only concertible from heling "by no means severely way of educating partsine by This is, of course, the infamous Bernfsverbot docree, which fur from being "by no meons severely administered in Germany", bus led suggestion that the only concernile way of educating partition by students is to teach for the enemial LLB. Not so. The fact is the Janu people and political investiga-tion of over 800,000 others, includhere at Enling we run s bridge and well-subscribed internal par-time Council for National Academic ing many thousands of members of the "moderate" Social Oemocratic Awards law degr**e**e.

Mr Zellick elsewhere mention Party,
All of these issues relate directly to the current situation in British Party.

All of these issues relate directly to the current situation in British coloration, and the growth of authorization unti-democratic trends so evident in views expressed by some of your correspondents. The authors of the report can only be thanked for expressing views and conclusions which their British counterparts have rarely land the courage and consistency to make public.

Mr Zellick elsewhere mention the CNAA. But surely he may read that as internal CNA in ending a go superseded may all care in the property and legrees for taken and Lumdon degrees for taken and the must be aware to the courage and consistency to make public.

Mr Zellick elsewhere mention the CNAA. But surely he may read that as internal CNA in ending a class of the may report the may read that the course of the may report the may report that the course of the may report the may report

Nur do we expose them to the manifest deficiencies of the old sydegree. We have a law department of which the evening student mile Sir.—Inspired by the letter of nor cult-agnes in Leeds (THES, Juny 101) we (members of the departments of German, English language, sociology, physics, constitutional law, politics, mursing studies, economics, community medicine, careers ulvisary park and psycholology at the University of Edinburgh) have formed a committee to moditur and publishes the reported erosion of civic rights and attack no neademic freedom in the quiversities of the German Federal Republic.

Just us the University of Leeds university in the German Federal Republic, Just us the University of Leeds university in the German Federal Republic.

Just us the University of Leeds university in the German Federal Republic, Just us the University of Leeds university.

School of Insiness and social

minuses to "twin" with Frankfurt University, so we have decided to furnt shullar links with the univer-School of business and social Enling Technical College. sities of Bremen and Glassen. We intend to publicize any development

### Lost reaching talent

Sir.—Your recent leader (THES, July 1) rightly emphasized the aced to restore stability to the teacher. training system, in restore ments and expluit them.

I share your score of argency but I would not wish to pass over the human problems left behind quite an quickly. The field is not lineted with the carpsos of the unfit but with the talents which overcame the most passed to the carpson of the unfit but with the talents which overcame the most passed to the care of the car vuguries of previous macrowet planning. Few of my colleagues will find that the compensation regulations in the compensation regulation of the phayment and a safeguarded slay only has meaning to absorbed employment in the teaching service.

The troining system toust be in-proved but manpower planning has; not finished.

Yours falthfully. D. R. SHADBOLT, Principel, Northumberland College of Higher.

# Chairman yet of UGC.

Sir,-To arold the unneces arousal of either clatten or desp in the minds of rhuse who read in Duckeofield's articla (THES, July 1) many 1 has all the things of 1) may I be allowed in state to the best of my knowledge news of my recent retirement I remoin, Sir, your obedient servint and chairmon of the UGC, FREDERICK DAINTON, University Grants Committee, 14 Park Crescent,

Letters for publication should arrive by Tunsday morning at the later. They should be us there as possible will the editor reserves the right would the editor reserves the right will be a morning than it accessions.

Landon W1.

# The case of the missing avant-garde

be lost its craticality, that the subject is in deline and a long-stunding culticational consens has broken flown. These floctrines may not have affected university admissions agastics, but they are fast becoming the scalar desumptions of public communersy about the subject. Headlines such as "A Sunival Kit for English", "The Critic as Vandal" and "The Death of Cambridge fights," tell their own story of declining

h is possible, of course, to keep on teach-ing literature as if nothing had huppened. Most of the time, most of us do just that, Our ambarity resides to the texts themselves mowhere has that need there strongly emphasized than in this country—and as long is the texts remain there, an can we. Yet existed has had other tasks hesides corrying on with the explication of texts in the "andy, placid way" that William Empson once retonmented. It is these tasks which are currently falling into abeyonce. English emicism is declining, I shall argue, not for want of a tonsensue lim for train of an expendence.

A critical avant garde is not o familiar idea A chileat ayangarde is not o tannorar need to this tomory. Yet Wordstvorth and Elion, at least need criticism as an essential tool in the work of revolutionizing poetry. For Coleridge and James it was a way of deter-Coloridge and James it was a way of deter-mining what had been ochieved in the very recent past. Matthew Arnold took up the Socratic burden of questioning and reproach-ing the ideology of the state. The "great rities" are so not become they have more "insights", but because their work is satur-ued with vitality and a sense of importance and that is what is lacking today.

Figlish culture, we are always being told, it planer, more empirical and less pretentias than its neighbours. On this view, the mass why we have no avant-garde at present is simply that we are not that kind of endon. In fact, the case is the apposite of this English criticism is still soffering from the chaustion of having had a highly successful avant-garde, of a particular kind.

Reano Poggioll in The Theory of the kont-Garde defines the main rharacteristics of and novements as activism, autogonism, which and agonism. Of all the acutlentic potal schools, it was Lesses and Scruting the fuffilled these requireconents in exempting the first trade of the story and placid sort of criticism goes in with an ever-missing dose of polemical fervour.

To right blames this on the sheep-like con-

The light blames this on the sheep-like con-order of the English intelligents a, the left when he can be a marked tradition and their to the lack of a Market tradition and their ton beoredeal lucumpetence. Yet the many and effectiveness of Strining's can-ter such that even today's most allo-man colors and schools have no allo of recolor rather than original creation.

Samuel ramer than original creature. Saming's scrivion lay in its campulation that apparamone of educational regeneration, and to no pot the secrets of its lasting influence its antagon's moves affected at made its antagon's moves affected to the common literary and as he can be added to the second or literary and as he can be added to the second or literary. the add at its own inculors such as Exra and ad I.A. Richards, F. R. Leavis's suming denotion of authors such as Milion, when Rielding and Dickens was no octain on the literary "academy" clearly bean with the factics of avant-gardering.

there will the factics of invani-garde there will be a supported by the sake, was also churecteristic of the sake and his followers never mode the sake of th

of Scruting's characteristics, his Actives, entangonism and nihilism t infrequent to the world to which was born, as is evidenced by the Wyodhem Lewis, the Calendar of Letters and Geoffrey Grigson's New

if conviction that "English" held the the of averting an imminent culture? The was, however, unique. Only the the toleralty or Moral Reormanent could the toleralty of his balls, that the e tolemolty of his bellef that the udilarian, "technologico-Bentha-ilizadon rested oo Scrutiny's shoul-

is unformulately no reason why ac descent tradition, it needs to be. selected from the property of the property ing of the past 40 years hos also



# the situation in America, literary criticism in Britain at present suffers from the lack of a sufficiently militant avant-garde

rise acvelopment of criticism since Leavis's time has been one of remorseless intellectualization. Today's fushionable critics often give the impression of regarding themselves as more sophisticored and conceptually adult than the poets and novelists they are discussing. To a lorge extent this may be attributed to the consolidation of "Criticism,

But in America we can now see the emergance of a new kind of critical assungande, which as yet has no parallel in Britain. The new ayant-garde exhibit believes himself to be combination of nihillsm with the frank Kermodo inadvertantly against the control of the Richmond lecture derives of Scrutiny's abundance of nihillsm with the frank Kermodo inadvertantly against the control of the Richmond lecture derives the first the

When the critic Edward W. Seid wes asked about the "new avent garde" in a recent in English Poetry not only the continue of the journal Discritics, he began this reply as follows: "The critics you have the continue to mera commentary.

When the critic Edward W. Seid wes asked about the "new avent garde" in a recent issue of the journal Discritics, he began this reply as follows: "The critics you have the continue to mera commentary.

named some young pacts on whom the future rested. In his later work there are no more young pacts, so that he is left flathing a major ideological house with the "practical criticism" of established texts as his unly real ideological weapon. To adapt what hance wrate of Yeats, no avant-garde critic could now propose to begin again where Or Levis bagan.

The development of criticism since Leavis's time has been one of remorseless intelget high salaries at famous universities, they are prolific writers of essays on other critics, they either write obout unfashlonable outhors or about o hendful of very fashionable ones, they use words like deconstruction and demysification . . . listing their attributes can be done as e sort of parlour-game, and one need only do it es a higher form of gossip."

Seid rejected the proposition at first, however, only to embrace it more fully. The real things that he and his fellow-critics such as Harold Bloom, Peul de Man end Geoffrey Harman had in common were not, he claimed, "crudely sociological and stylistic". Their common quality was simply one of redical innovation, both in style and in subject-matter.

It will be seen that Said takes it for gran-ted that today's avant garde caked quest be French influenced (and not merely by those texts which have already bean trunslated). But the quality of his innovenion is startingly

Inis is not to argue mee broom and Sead are mutually compatible. In politicist terms Said appears es e ratinnelistic radicel while Bloom is in impossioned conservative. Bloom's theory of influence asserts the inherent compenitiveness of the creative act; "strength"

The strong part refects and wilfully misreads the literary tradition, going through the arant-garde sequence of activism, antagonism, whilism and againsm though Bloom does not use these terms).

At the same time—and this double hind is central to his theory—the pier can do no more than revise or rewrite his predeces-surs' work, so that his new prem will even-tually become reconciled to its model and bear witness to the continuity of the tradition.

The new poet's effort of rejection and mis-The new puer's effort of rejection and mis-teading was necessary shaply as a deman-stration of attenuth and a proof of his inde-pendent stature—a kind of predatermined adolescent tebellian. Since cultural "origin-nity" is based on a process of unconscious repetition, it is eminently suited to human-istle study. At this point Bloom drops his oir of expounding the sacred mysteries, and becames an eliquent apologist for the volues of the scaleony.

Reginnings, as its title implies, may be read as a reply to Bloom and a repudiation of the hurden of unxiety that cultural tradition entries. Said's ottempt is in recupitive the unidern serier's alors in beginning his work and to affirm the validity of creative intentions.

Mudernism involves "rodical discontin-aity" and the severing of any "dynastic tradition"; lineal relationships modelled no the family are replaced by a process of delib-erate, artificial fictive construction. We are left not wish the Bloomian succession handed down from poer to meet but with a equilitude of universe but discontinuous and "decentred" modern texts.

centred" modern texts.

What we have here, then, one two alternative "mans of misreading"; two modes of critical themetic which confirmt one another in stark upposition (Said, significantly, is as brilliant a critic of relatively orthodax fiction as filmon is of avant-garde noets.) Buth writers use un abstrately meditative style—Said's approximating to rationalist explication, Bloom's to Rebhalistic recitation—os a cover for a good deal of preaching. Both draw, it seems to me, an a source of intellectual radicalism and daemnnism which seems to have passed this country by (thungh it is evident enough in France). We might call it the madness—or the genius—of the mineteen-skyles.

nineteen-sixtles.
And what of pheir impact in England? The

And what of their impact in England? The Anciery of Influence was remaindered over itere, while Beginnings, which has been reviewed in all the American quarterlies, two yet to find an English publisher. Books like those are no doubt too brosh or too cravy in a enture where the preferred "serious" erlicol stonce is more like that of Urlah Heep.

Terry Engleren is on record as describing the British Marxist newheaterian as a "tolerated house guest of Europe", "painfully conscious of his inalequacies". To write this is to sceept the rule of on opigone, and to decline the rigours of avont-gardo consciousness. A ynaguard never apologizes.

The new American critics, it is true, are small rilque (most of them are at Yale) surrounded by what Soid calls "a kind of clubby hot-house grandeur". The issue of Dimenies from which I have quoted consisted of a 17-page interview with Said, four separate reviews of Englandings, a review of a hook by one of the reviewers and an essay on Stevens by Harald Bloom.

one of the reviewers and an essay on Stevens by Harald Bloom.

This surely takes us into the reulous of the TLS's legendary Medislay Bogdonovich, founder ut o telephone advisory service for young structuralists, "Dial-o-Critic All that can be said is that chouldiness iovariably has been cherocteristic of aveot-gerdes; es

hes been cherocteristic of aveot-gerdes; es witness Scrutiny.

It is easy to criticize avant-garde movemente observer : they are perochiol, lossifierably pretentious, "politically schizoid (how cours they get those high salaries at famous universities?"), grotosque in their contempt for the general reeder and so on it mey be worse to live to a culture which has lost the enpacity to generate a critical grant-garde.

The impact of Leavis'e methods was broadcoad god (it seems in retrospect) to some extent dissipeted by "cultural criticism" of the kind once ossociated with Richard Hoggart und Raymond Willisms. Such

row. Modes or poetry and fiction.

Frank Kermodo inadvertently registered this change in the change well as, our cultural neighbours.

The author is lecturer in English of Rending University.



# 

# Limitations of the survey method

Firtility Cuntrol and the Medl-cul Profession by Jean Ailken-Swur Craum Ifelm, £7.25 ISBN 0-85664-463-3

Single and Pregnont by Sally Machilyre Croam Ifelm, £6.95 ISBN 0 85664 402 1

The subject of children is one of intense personal importance in chase personal importance in chase lives; whether or not in have children, when sud how it have them, how not to have them. Thesi questions reduce to the issue of the meaning children have both culturally and in the context of each individual's identity and lifestable.

Conventional wisdum says that there is more "thinking about thirdren"—moru deliberate decision-making—than there was fifty or a hundred years ogn. After all, more education and developments in emtraceptive technology theoremically emble more people to determine their own reproductive fate, and coinciding with a fall in the birth rate from 35.3 per thousand in 1971-80 to 13.0 in 1974 they seem to offer some kind of deductive explanation as to why having children has become a less papular octivity. But what really is going on? How do people in fact evaluate into outcomes—luto those neat statistical tabulations of bables born and of manoeuvres used to prevent or arrest pregnancy?

similar straightforward account of the street professional groups to que a response of the street professional groups to que a special content of the professional groups to que a special content of the professional groups to que a special content of the professional groups to que a special content of the professional groups to que a special content of the professional groups to que a special content of the professional groups to que a special content of the professional groups to the special content of the professional groups to the professional groups the professional groups to the professional groups the professional gro



statistical rabulations of bolices with an according to the constitution of the consti

rise in the hirthrate. A rhule catalogue of disosters beset the project, and the least of which was increasing disagreement between Genffrey Hawthurn and Jaan Husfield as a how research as fretility should be conducted. Rather than disguising these differences in a single publication, the decision was taken to publish separately. But Thinking About Children is not just a book about fertility, and not just a book about fertility, mer is it a book obout just one research project, since, in considering the specific, its authors rules many generic Issues to do with the meuning and value of sociological

Such a detailed history of the Such a detailed history of the prugress of a research project is rare and ought to be compulsory reading for oil thuse emburking an similar ones. While a certain amount of tunl-blanding is in evidence (the SSRC is criticized for funding an undercosted und badly thought out project, for exomple) the authors see the central prublem as arising from their own growing sophistication obout the weaknesses af the survey method.

With a sample size of 290 they

wenknesses of the survey method.

With a sample size of 290 they faced the task of quantitative onalysis, but found that this could not do justice to the richness of the interview material our to the different meanings which the same word/concept had to different individuals. (For example, the notion of "enping" with children as a reason for restricting lentilly appeared in have different meanings to different examples.)

Hence they came to reject the survey method as being based on sympathetic interest, known

reason in law elifferent meanings to different meanings to different meanings to different chuples.)

Hence they came to reject the survey method as being bused on mercentingle of when of social phenomena and appropriate this meaning of "factual" duta. They demonstrate well just have inappropriate this mraind turned out to be in their myn case, ultimugh some of their myn case, ultimugh some of

Timely word

Karl Krons and the Soulker hy Thumas Saasz Routledge & Kegan Paul 16th ISBN D 7100 8555 9

"Hecause I write about ace events", said Karl Krau readers helieve that I write how. I must wait and as they reall be thusly." The acting for this great wing played o major role in the intellectual life during is definers contains to the earlier is this century. this century, As unutalist, critic, hasural

As normalist, critic, language social observer, post and politicisker Kraus commented at a supports of human activit, the playing the aphoristic form a pression to encapsulate it is an aphorism. It is the can never be the whole and it either a half-truth or received. n-linif ". The first port of D. Sneh

sketches an account in a correct, his influence a chi thinkers, and his place in the characteristic of the number committee of nord life of the beigh using the examples quoted for a taken from the second and a book, which contains there are latters from Kraus's sping tively few of which bors again fouglish. In both estate emphasis is on his view mast the psychiatry of his day.

Kraus's most facilitied of its and a constant of the page.

ond by their place in certalo social processes (such as urbanization for against the text has many exections features, ranging from the inclusive of problams. The level of the service of the service of problams. The level of the service of the se truths and a half.

truths and a half.

Ann Oakley

Michael Sher Parameter fair value for mouey.

P. N. Chrosfon link at the Las Angeles metro.

# Hard rock

Applied Geophysics by W. M. Telford, L. P. Geldort, R. E. Sheriff and D. A. Keys Cambridge University Press, 19,75 ISBN 0 521 20670 7

For many years teachers of applied geophysics in this country complained of the lack of an up-to-date and comprehensive textbook on their subject. Several modern hooks deal with specialist aspects that example, reflection sets anology or electrical sounding) but there has been a real need for a general text suitable for the graduate or specialist undergraduate level. Most of the available books were published before the mid-sixties, but since then there have been enormous advonces in technology and in techniques, although the fundamental principles have not changed. This is one of several books in this field published recently, no doubt partly in response several poose in this field published recently, no doubt parily in response to demand.

in over 300 pages the full brendth of applied geophysics is covered: gravity, magnetics, setsmology, electrical and electromognetic methods, radioactivity and geophysical well bagging. I doubt if any geophysicist would claim to be an expert in all these fields, and the decision to ase four authors covoring academic and commercial experience is a good mac. The different methods are discussed in a similar way throughout. Each includes a discussion on fundamental theory, the released physical properties of racks, field equipment, field methods and interpretation techniques. Field examples and problems are given at the end of each clumpter.

Space, pattern, process

The chapters are gravity until magacic methods are radger traditional and lo same respects are a little dappointing. In terms of basic days and field methods, the cuvery lowers, more space is elletted to show a field methods, the cuvery lowers, more space is elletted to show a field methods (via the spour methods even the security discussion of availables, indirect two-dimensional interpretation of availables, indirect two-dimensional interpretation is mensional interpretation is mensional interpretation is mensional interpretation of direct methods of the chapter on mognetic methods.

Similar criticism cun ba levelled the chapter on mognetic methods are compoter methods are compotered and the component of theory it is not surface and analysis and analysis of gravity and many and method and analysis of proving an approach analysis and analysis of gravity and many and methods are component of the process which are co

Remote sensing

As Burrett and Carris ante, no text-book has yet emerged with the broadening of air-photo interprets to the Into remate sensing, although the have had a number of symposia proceedings. Their book may illustrate why, for although it is a com-petent sorvey of the field, it is hard to imagine just who will find a real use far it.

Although most courses in air photo-interpretation will now contain some examples of satelite imagery tas well as false-colour and perhaps infra-red images), these ore still introduced more as curiosities than as significant sources of data about the real world. Students on such courses may well be sent off to read this hook, and it is true they will find here a useful brondening of their outlook. However, if they seek to use it as more than background reading, they will not get far, fur nothing is exploited carefully enough to be fully comprehensible, and certainly not to be fully opplicable.

In Angstroms or nerves. The same fulure is used in two lifterent form explanation. The scope is rother different from Entrett and Cortis, and the atmosphere is igoored execup for its role as a barrior to be pencurated by the electromagnetic spacement in particular carry virtually no explanation. The scope is rother different from Entrett and Cortis, and the atmosphere is igoored execup for its role as a barrior to be pencurated by the electromagnetic spacement in particular carry virtually no explanation.

The scope is rother different from Entrett and Cortis, and the atmosphere is igoored execup for its role as a barrior to be pencurated by the electromagnetic spacement in particular carry virtually no explanation.

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The scope is rother different from atmosphere is igoored execup for its role as a barrior to be pencurated by the electromagnetic spacement in particular car

good mic. The different methods are discussed in a similar way shroughout. Each inclindes a discussion on fundamental theory, the relevant physical properties of racks, field equipment, field methods and interpretation techniques. Field examples and problems are given at the end of each chapter.

As might be expected the single chapter of the book being up to ditte and bloody and the starter of the book being up to ditte and bloody and the problem applies to the many bloody being up to ditte and indifferent varto theory to question of the people of the process. The standard seed are good as a method to the use of the form compression and link of precision detail. Material aways from clastic varto theory to question of the ground the properties of the single-stand in the properties of the single case argainstallor to the operation of the ground the properties of the procession of the properties of the procession and inchesses and in the single case argainstallor to the operation of the ground the properties of the single single properties of the procession and the properties of the single captures are problem is the inclusion of large anuments of unexplained and electromagnetic such as a problem is the inclusion of large anuments of unexplained and muscal detail. Name of the ground the properties of rocks, and fairly canventinatal chapters and electromagnetic such as a problem is the inclusion of large anuments of unexplained and muscal detail. Name of the group processes and control with separate the control of the properties of rocks, and the control of the properties of rocks,

Intraduction to Environmental Remote Sensing by E. C. Barrett and C. F. Curtis Chapman & Hall, £11.00 and £3.95 ISIN 0 412 12460 2 and 124 70 X Remote Sensing of Environment edited by Joseph Lintz Jr and David S. Simenett Addisun-Wesley, £22.00 ISIN 0 201 04245 2

As Burrett and Curtis inte, no textbook has yet concrete with the Simenett Captions of Freedom in the Captions and sewerage works in his list. Yet it would believe the Sixt. Yet it would believe the severage works in his list. Yet it would believe the interpretation of a discovery to find government in the ERTS (Earth Resonrees Technology Satellite) composite colour images of southeast England on the high "rural head is real or green". Similarly the multispectral images of Thertord do not implicate which the long that the wave-lengths used.

caption for do they list the wave-lengths used.

The American text edited by Lintz and Simonett falls back on the multiple author approach, with 20 contributors for 17 chapters. The editing is minimal; there is not even any ottempt to standardize the units used, so that one contributor uses SI traits and the naxt refers in Augstroms or acres. The same figure is used in two different chapters, and the column pictures in particular curry virtually no explanation.

The state of the recent work on a proach which tries to uvoid the approach which allows them to octhodological controversy surrounding the question of whether or not a macro-social view can be book. I would gladly crived by summation of observations and dispersal, which allows them to one an accordance of the process of the conceptualized by their saucture, their categorization and differences on the field lo interpretation.

The state of the recent work on approach which tries to uvoid the approach which allows them to octavorry surrounding the question of whether or not a macro-social view can be derived by summation of observations about individuals. Groups are conceptualized by their saucture, their categorization and differences on the last two chapters or conceptual in processes (such as urbanization for processes (such as urbanization for paperoach which allows them to introduce the notion of class convention of observations and dispersal. Mocro processes (e.g., contineotal nilgration) and differences on the last two chapters or conceptual to their place in cortal social with lo chapter eight and their place in cortal social the text has many excel-

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# Fantasy born of frustration

Edgar Rice Burroughs: The Man Win Created Tarzan, by Irwin Porges New English Library, £19.50 1835N 0 450 03048 2

There can have been very few lives so full of foilure as that of Edgar Rice Burroughs. Its single, omizing success — the creation of one of the top money-spluning fictional characters — scands out as a merciful observation of Fate. Yet the failure and success, one assumes, tions of constant defeat giving rise to the famusies which made Burraughs a fortune.

Ditil his mid-thirties his life fol-

loved an unvarying course of minor di asters. After recurrent defeats and misfortunes, bath academic and social, at a series of schools, de flunked the entrance exams for West Point and the United States Military Academy, pursued an undistinguished, short-lived carcer in the army and made immunetable, ill-faced excursions into business and commerce, bath as buss and employee. Everything he concled torned to lead, Scarcely a detail in the recount of his blighted existence fails to confirm his incompetence, enuplete lack of judgment and sheer, appailing bad luck. The relatiless disasters occasimally reach the level of force, it seems all tan inevitable that, during a sumawed an unvarying course of minor reach the level of force. It seems all too inevitable that, during a sammer on his brother's Idaho ranch, between schools, he should prove "more or less of a flop as a chore bey", managing, omong other things, to be run oway with and "dragged round the country three things on [his] face " by a tenm of horses just unbooked from o plough. It is equally typical that, many years later—on the some ranch again, this time between jobs—fix should be accidentally but violently hit on the head with a clab and suffer hallomations and diazy spells for several weeks after.

Nor did the fablures end with the pedylection of Tarzan of the Apes and its sequels. The backs made a forhune: everything else went on much os before, hycestments collepted; attempts at farming and land ownership flopped; two marriages failed.

There is something hizarre shout



The quest for enlightenment

and its sequels. The backs made a fortune everything else went of much os before. Investments collipsed; attempts at farming else with which make up this unfortunate life, special attempts at farming else with the proposition of a lifetime's disasters. The proposition of a lifetime's disasters allow the proposition of a lifetime's disasters allow the proposition of the pr

iffe. Was there a link between tharch Manuments in Romantic weakness and the Mityich content which eventually made him by Mcholas Penny time? Porges affers no those hide University Press, £10,00 the matter.

the matter does he sites of the help the first style press, £10.00 he there are not not provided as a first marriage (which ends) decided and apart from a few "The main problem, a come also bleathers, and three children's bleathed and apart from a few "The main problem, a come also bleather, and the maintain of the nother of the hope has been bleather, abit the same of the one of the aparts, we have bleather, abit the same of the one of the one of the style of the target bleather, and the same of the one of the style of the target bleather, and the same of the target bleather, and the same of the target bleather, and the same of the target bleather, and the target bleather and the target bleather, and the same that the target bleather and the target bleather, and the same that the target bleather and the target bleather, and the target bleather and the targe

tof its victions could ere inc.
But Porges's analysis of his a
condined to the suggestion is
rendered him "resiless".

Nooconformity, There the two Edward Baines, son, bath MPs but buth

portant as proprietars feds Mercury and shief of corthern indus-East Parade Congreצעעענ

# Orientations towards an after life us (\* the cloud-huro angel ascends to Mrs Coke, daimily indicating her celestial destiny, whilst a purm, sented at her feet indicates her hurbounts enduring have by hold-ing aloft a fluiding heart s, force one, as with Peysner, to look affects at the famillar, and to sook out

can'd gates, and improved ploughs. The less acceptable aspects of eco-nomic activity are conspictions by their absence.

in church monuments—as saints, Madonnas and angely—and their restricted secolar status. He sug-gests that the movel practice where-by "society permitted women, or at teast ladies, to ascend to fleaven on informatics," we be builded. on monuments, was basically a chivalric mechanism "through which wangen are camponated for the lack of freedom and the strictly prescribed sacial rules which derive from the importance. from the importance of moder-load". Finally, Penny is also cancerned

with how far such minimuments can be used as visual indicators of the strength and cuotent of contempor strength and cuotent of contemporary religious beliefs. Much of interest emerges. For instance, certain stylistic transformations in monumental fanctary sculpture, including the introduction of such matifs as ivy lenves and broken columns—symbolicing management. columns—symbolising memory and personal loss—provide strong suppersonal loss—provide strong sup-parting evidence, and from a non-

portrait medallion horne olog le Penny also discerns and illustrates a relationship between the new sculptural depiction of women in church monuments—as when a period with the desire to feel closer still to a sprintial world whose existence was being increasingly and the period of the p

At the same time, the almost nerving corporeality of some early Victorian portrayals of the decensed becomes more intelligible in a socihecomes more intelligible in a suciery whose traditional beliefs in the
resurrection of the body grew more
and more difficult to reconcile with
the premises of the natural sciences.
When linked to porallel streams of
religious scepticism and religious
revivat, the interaction of Evangelical and High Church theology and
the Rumantic notinn of "the unkanten", the interpretation of such
monuments becomes very rountlex

The troothe with the Nathanian's
study, of the sont symbol is that it
is a thesis, not a book. It may no
lication, but appears with all the
features and forots of the higher
meademle package. It is neatly conpressed, streamlined and devoted to
a single theme in English, French,
German and American Romantie
poetry, in a somewhat libbakered

parting evidence, and from a non-Cuthulic source—for Philippe Aries's broad contention, that by 1800 in Europe death, especially that of a loved one, was necepted with greater difficulty than hitherta. Furthermore, such attitudes in death were shaped less by its frequency than by prevailing attitudes to the afterlife. By representing the status passage of the electased by human figures symbolishing the flight of the spirit ar soul, rather than by the truditional forms. Graham Howes

it may be such the worso for that.

It may be sine studies seek to evoke is refer to the congregationalism between stilling fruch Royolution and the First water from the biblicol and of Hape fruit bampnets this distinguished minister of 1839 sing with his cousin at her huster religious conversion for evisome the worso for that.

See studies seek to evoke thousehor of middle-class a Congregationalism between the Royolation and the First was phillstine. An ironically entitled water from the biblicol and of Hape fruit bampnets disligatished minister of 1839 awith his cousin at her huselfflows conversion for evital religious conversion for evital religious conversion for evital religious of Nonconsultations of Nonconsultation

ence on Britonal in the suggested to confident in the suggested to commonison—Burroughs was a child to flist time. So, saw been to Prayers: Sindles in his other beliefs—that enterties had nonconformity, 1780-1920 mean should depend no saw? Clote Binfield in the life of Edward Baines junior. There is an analysis of the cureer of Edward Minil, lender of the also-confident enterties beat men of the stants for father fundamentally, from the partition of the stants for father fundamentally, from the partition of the stants of the cureer of Edward Minil, lender of the also-confident in the life of Edward Minil, lender of the also-confident in the l

the ratissons, at Witham in Essex, enjuyed Mrs Rudeliffe, Walter Scott, Southey and Wordsworth, and had their sons painted by Thomas Law-rence. Again, the vogue for Dissection contains Godic in the late nine-renth century is shown to have been a matter of laste as well as dictated by economy. The surprise dictated by economy. The surprise ing extent of interest in orchitecture, hortcultore and interior design among men unit women associated with Bowdon Downa Chapel, Manchoster, at the turn of the tweetleth century is libustroted in an essay which explores some beginnings of the suburitant ethos. These groups, Binfield reminds us, Larian, traditions. "Between the Puritan and Art", he concludes with much instice, while in 1893 51 new pita for the property of the property of the prism and Art, he concludes with last of the prism and Art, he concludes with much instice, while in 1893 51 new pita for the prism and art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and Art, he concludes with last of the prism and art of the prism and Art, he concludes with last of the prism and art of the prism and art of the prism and prism and

Nor word miners yet a race spart.

D. W. Beblington | They were mobile, seeking new work

For by 1900 the extractive trades were becoming more structured, more becoming more structured, more stilled, less migratory and dominated by a new, smaller class of more powerful owners. You these to the growth of trade unions, it is to the growth of trade unions, if no light have get a different longers sion. If no look from his imagery of the flying and dascending soul to molophors of flight used for poetic genina and imorphotion which can almost rival Shelley's high-flying.

this in Evaluations. "Between the Prima and Art", he concludes with much justice, "there is tension but nu incompatibility".

The last three essays deol with Buldwin Bruwn and Silvester Buldwin Bruwn and Silvester Buldwin Bruwn and Silvester In Britain in a singla month. The "free miners" of the Forest form, two uninisters who were properties or respectively in the loungy and the Poor Man's Venture laad miner in Derbysbire where, in 1872, there were nearly 200 separate coocerns, and the sum of the impact of the First World War.

This, then, is an original book and the sum of least hecause it rests on a range of hitherto neglected local source materials. If it makes few concessions to the reoder unfamiliar with the subject, its distinctive in the factory system in the sum of the sum from the bottout up.". Now it is starting to produce some really useful work. Childhood and The Uniformed Working Class are to fullow, while the newly launched Hislow, while the newly launched Hislow and Starting of the newly launched Hislow, which will ect as e fucus for workshop activity.

Int. Patrick Rebshaw

Patrick Rebshaw

Rebshaw

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Rebshaw

# Metaphor of the soul

by Suzanne Nulleontian

Macmillan, £7.95 ISBN II 333-21,199-8

known", the interpretation of such moniments becomes very complex indeed.

Penny's approach is apen, perceptive and illuminating although meeting and illuminating although meeting and illuminating although meeting would have welcomed rather more systematic attention to the inscriptions which necumpanied the inner systematic attention to the inscriptions which necumpanied the inner gery, and more detailed case studies of upper-class patrants—such as the illowes or illustrickes—whose religious attitudes and stylistic deniands appear to cuincide. And while church monuments clearly did provide "an outlet for imagery inherwise diaconanged by Prutestanticson" one might organ that they note in the individual voice which in provide "an outlet for imagery inherwise diaconanged by Prutestanticson" one might organ that they note in the individual voice which we need to hear in real books thoy moke far unreadobility. The full study belongs in the thesis shelves, where it would be useful for reference by other writers of similar theses, and done hash and impersonal and torght, and I followed the bird's-eye view of poetic extracts and yet too fittle earling that there were the many feeling that there were that the bird's-eye view of poetic extracts and yet too fittle earling that there were that the bird's-eye view of poetic extracts and yet too fittle earling that there were that the bird's-eye view of poetic extracts and yet too fittle earling that the

tries the flight of the spirit nr soul ruber than by the traditional stage of the traditional ruber than by the traditional ruber than the ru II takes an Empson in

politics were of major importance in sharpening and suaring industrial relations.

For by 1900 the extractive trades

Attnuigh the suthor is well aware that "soil" overlops with other concepts, like "mind", "love" und "essential self", I thought some of the loter pretations

The Proud Knowledge: Poetry, Insight and the Self, 1620-1920 and the Self, 162

which Adam sought to legislate for himself and so feil. But this is that sort of book which in one sense leaves you knowing less at the end than you know at the boginning. We start with a toleroby crisp theological conesption; we end with a cloudy sense that we heve been rauding about knowledge of whatever-ir-might be-simportant-to-know. It might be said that this is just one more version of the modern light from ception of personnisty it had every longer of one of the new universities the follows the course of the biblicial "Fe still and know that I om. God" is almost comically in the ception of the modern light from a sunderstrain and its interest of the special and know that I om. God is a simpst comically the control of the still said know that I om. God is a simpst comically introduced to "Be still said know"). It was a considerable that the is is controlly the control of the still said know that I om God is a simpst comically introduced to "Be still said know"). It was the control of the modern light from clearly longer of the second of the memory of Virgil-longed. Millton's objections are both lass and more concrete than More of leaves and more concrete than Moyan's. In again, this said more can hardly be named at all shown that the course of spiritual endight not be not spiritual endight from case that the case hardly be named at all shown that the case hardly be named at all shown that the case hardly be named at all shown that the case hardly be named at all shown that the case hardly be named at all shown that the case hardly be named at all shown that the case hardly be named at all shown that the control of the spiritual endight of some false simplifications. For sample, he follows is gullby of some false simplifications. For sample, he follows is gullby of some false simplifications. For sample, he follows is gullby of some false simplifications. For sample, he follows is gullby of some false simplifications. For sample, he follows is gullby of some false simplifications. For sample, he follows is

ample, would be say a only unstable quest of Piers Plowman? Win nothing on Donne's most important of a written so wall oo which the Odyssep Romantic imagination ing the Odyssean I coming; turned it into mystery, and seat he among the dead to leach he meaning of his home. The light and light an you hungry.

H. H. Asquith, for is shown to hare been bedded in a northern Conditional and the same cagle cyc for the sale and the same cagle cyc for the sale architect Faulkner Armilis genial wink was in This is a very personal persons, an exercise in the vigosites deal with of Mooconformity. There

# BOOKS

# The Jewish banker and Bismarck

by Fritz Stern

Allen & Unwin £11.50 ISBN 0 04 943021

This is a book obout Germans and Jews, about power and money, and

adventures when necessary. But at the suggestion that there were links between Bismorck's politics and his porsonal fortune, Professor Stemunieashes one of his not infrequent barbs of German historians with the romark that "only o very naive observer—or a German historian affecting contempt fur money—world be attrurised to learn that at times of great political crisls Bismarck had time to think of his investments". It was not that he moda policy to auit his personal mode policy to acit his personal ont works to appear for a long time. Such as the manner in which Stern

deals with the partnership of two mean—Blemerck and his Jewish hanker, Gorson Bleichrider, but it is banker, Gorson Bleichrider, but it is reolly much more than thot. It is major part of the story of the sunding of the German Empire in which a Jewish mhority, embattle though it was, played o powerful role. It offers deep insights into the layonership in the layonership and series with the partnership of two so unstable and short lived.

For obout 40 years Bleichrider will fund the reasons why it wos so unstable and short lived.

For obout 40 years Bleichrider will fund the respective of the consequences of political and military man in ell monner of wovs, was general odviser, lobylist and continuous point of wears of the companion of the sundand street in the Chinecellor's own spending vast sums on prise general odviser, lobylist and continuous man in ell monner of work, was general odviser, lobylist and continuous point of the companion of monter of the companion of the compan

then the Romonians should see to it that they poid their crediturs first. And after all they had game through together, in his memuirs Bismarck makes no meation of Bleichröder and since that time German historians have done much the some thing.

It is not, then, a pleosant story, Anti-semitism runs tight through it.
Stern bitterly points out that just us
at the birth of the new Empire
Polish Jews living in Melz were the
first victims of chouvinistic brutol-

# flassified Advertisements Index Soviet studippointments vacant

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of the last, and tenth of the Soviet Russia, covering the Colleges and Institutes of yours of the Soviet regict of clusts 30 years. One may refull one and the Chiefe Contain the lindex.

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aff tild Science Education Contra, Cheleis Chitege, in voic on the seasonant pri school performance in Science. The project is poil of the programme of the Aspeasment of Panlonence Unit of the O.E.e. One post will be largity eoriograed with sampling policy. How beeking, the analysis of date and associated computing lasks. For little knowledge of Applied Statistics, Educational Measurement and date processing to required. For other posts, the prime requirement is an ability to contribute to the development and validation of a wide range of assessment techniques suilable for use with pupils of apps between 10 and 16 years. Salary will be on an appropriate scale without the reade 23,333 to 26,555. Appointments will be list periods up to five years. Applications to see and further particulars may be obtained from the flegister, The University, teeds L82 21, ducking salarance humphyl 22/19/D0; Glasing data for applications.

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Fellowships and Studentships

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Applicants should have an interest in Rublic Administration. An appropriate qualification would be en honours degree to Business Bludles or a combined degree, e.g., Economics and Government. Teeching duties are melnively with the Higher Netional Olpiome in Business Studies. Experience in Local Government will be an edventega. Stell ere expected to underlake activities, including research, in addition to teaching duties.

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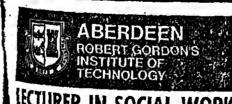
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Galary: Lecturer, \$12.146-\$18,865 (3 tonges). Applications staling nome, age, eddress, qualifications, expertence, present position and solary, nature and terri at position applied to, together with the names and addresses on three polaroes should be east to:

The Academic Secretary, Torrons College of Advanced Education, Holiscons Reed, UNOSPOALE, S.A. 5032, to resc. 1991 Academic July, 1877.

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# Fourth university is name of Victoria's new game

Veil Nilsson and Peter Sheldrake examine ome preoccupations of academic oliticians in Australia

One of the more recent games belog played by academic point are a should have been supported as a should have been community to be the supported as a should have been supported by the su

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The Victoriam Government was under publical pressure from bothers, Bendigo and Geelong, and had already annuanced that there would be a country university on the three grounds of, first, an increased decound for university places, secondly, the provision of external studies, and finally as a contribution to the State's decentralization policy. Of the pairs of institutions (teachers colleges and colleges of advanced education) in each naw they chose in build their new noiversity on the teachers colleges, envisaging a three campos noiversity, "triplicating proparantues (that shoring facilities) in competition with the CAEs, with the teachers colleges absorbed lines the university as "achools of educationt".

Faced with this horror, the Universities Cummission had to grapple with a web of problems, which included assessing the weight of the Victorion Government's argunounts, calcentional and non-educational, practising "rationalisation", and deciding what is "appropriate" for something which would be a university in more than name.

In the end they settled for one university, in Goelong, closing down the teachers college and the college of advanced education. Let us examine how thay arrived there. Of the Victorian Government's two educational arguments (external studies and numbors) the first was found to be less than compelling, and the second probably Ill-founded. This scorcely troubled the Victorian Government. They

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INSTITUTE OF TECHNOLOGY

was "deventralization". A university is "a new imberty with the publical advantage of " prestige".

Both the Victorian Government and the commission were concerned about "duplication". The Victorian Government though that to avoid "wasteful duplication" the teachers colleges should be alsorbed into the university and the CAEs left outside to do many of the same things as the indversity. (The university itself was to practise "triplication" on three commisses.) campusés.)

The commission, however, were more concerned about duplication between universities and CAEs. They believed that there should be only one institution for each town. The presence of a university, they feared, would affect the "status" and drowing power of the CAE; which would be likely to suffer by the comperition.

Rut what, then, would one do If stuck with a university whicher one liked it or not? Answer: close down the CAE. And what would one do if it was the university which had begun to saffer from the competition (in fact a fair description of what was happening even then down he flohart with the University of Tasmania)? Why, close down the CAE, of course.

llohart with the University of Tasmania)? Why, close down the CAE, of course.

This is exactly what o Committee of Enquiry into Post-Secondary Education in Tasmanio, with the same chairman, soon recommended. In Victorio the question was not whether there should be a university, but what kind of university it should be. Here the Universities Commission bad no doubt at all: it was to be a real one.

There would be no problem shout business studies, and the university would go as fur as to include textile end would technology; but there it would slop. There was to be an unicking about with university standards; the new university unust have "genulus university values and university unust have "genulus university values and university unust have "genulus indexistics of the existing colleges". But how is it decided what is appropriate? The AUC have a system to do this. There are differences between CAEs and universibles—not exactly differences "in generic terms", but they can be told apart.

At least, some of them can be told apart—if they are different enough. Of course they are different in more than "name", although some of them are very similar. But we would not like you to thick just becouse of this that there is any "confusion of purpose" implied here. We know very well what we are doing when we judge the differences. That is our job. It is a bit like the woolclussing we are going to encourage in Geelong. If there is one thing we are sure about it is that the CAEs are "compilementary" and "alternative" to universities, There is, of course, unavoidable "overlap" unil homely "blurting of what could otherwise be very awkward and divisive distinctions.

Toke those "large metropulitan colleges". Anymae c. «

Toke those "large metropullian colleges". Anyme contents, and the later that they are different; and firm not imagine we would be very pleased if they started trying to "model themselves on microstiles". That would "destroy" them and their "hasic objectives". To prove all this consider the following package. Token of o winds this would convince any unblused person that "a broad distinction" can still be drawn between universities and colleges. It you take each of these criteria separately of course you will probobly find that particular colleges or universities are indistinguishable from one another.

Now you might find this land to believe, For lust 1.30 Australian dollars you could read The Proposal of the Government of Victoria for a Foirth University in Geelong yourself.

Ballarot and Bendigo. (Conherru: AUC, December, 1973), for yourself.

What the commission did in this extraordinorily muddle headed stotoment was to take the familiar vocational/nunvocational distinction and then forture it to fit what actually goes on. In the process they have confused vocational with applied, and questions of value with those of motivation. They have introduced the irrelevancies of entry requirements, pertiting study, library facilities and the lowest level of instruction offered by the institution. They count the fellowy of division in urguing, for instance, that if a substantial responsibility of an institution is, say, research thee e substantial responsibility of every member of their institution must be research.

Woest of all they restrict themselves to a narrow empirical opproach to the question of function: the colleges in fact do cother more of their thing, and the universities in fact do cother more of the tilleg, and so un. But whot ought they be doing? If we do not feee litts question we connot even talk about what is appropriate and inappropriate.

Perhaps the most important thing about the report, however, is not all this muddle-headed thinking, but the weighing of very different kinds of vehics in arriving at a final recommendation. In talking about what a university is, the commission lies described rather than evaluated its work.

Although the commission montions in passing the amenities of country scadenic life, there is little doubt that their moin concern is the economic one of the impact of a new industry. But how do we know that even this corresponds to what the Victorion Government has in mind? If they are integrated in votes it might be enough for them that people marely think they are better off financially, or that one perticular group is better off financially, or that one perticular group is better off financially.

Even the economic arguments are not spelt out in the woy that C. Selby Smith spelt them out in his contribution to

woy that C. Selby Smult spelt them out in his contribution to the Regional Colleges (Canberra: ANU, 1976) study, end he has emphasized the difficulty even of assessing the economic factors involved, let along the difficulty of teasing out the multiplicity of values packed into the notion of a decentralisation.

The commission is convinced that the decentrelization arguments will support one university compus outside the Melbouche metropolitan area but not more than one. But how do they know that?

how do they know that?

Oo balance the outcome of the commission's investigations is remarkable. They discovered that, on educational grounds, there is oo need for a fourth university, that it probably will not be fully viable, that a new university will probably reduce the educational opportunities of the local residents, and that this absorption into a university will have bed consequences on other colleges of advanced education. However, because of the Victorian Governmeet's policy on decentralization, they recommeded that there should be a fourth volversity in Victoria. If this is the way in which the decisions are made, it would seem that the glib submission writer should have a field day.

Reser Shaldrake is a reoder and Neil Nilson a senior level ther in the education department at the Finters University, , of South Australia.

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